

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

ABS-71 YELLOW/MILKY

TECHNICAL SPECIFICATIONS
Low VOC ABS Solvent Cement



PRODUCT:

Spears® ABS-71 YELLOW/MILKY is medium bodied, fast setting, high strength ABS solvent cement for all classes and schedules of ABS pipe and fittings with interference fit through 8"

INTENDED USE:

ABS-71 YELLOW/MILKY is for use on Type I and Type II ABS (Acrylonitrile-Butadiene Styrene) plastic pipe and fittings. Typically used for drain, waste and vent systems (DWV), conduit and sewer applications. Yellow may be required by certain codes, Milky dries clear for very finished appearance. See ABS-73 for BLACK color cement.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Yellow or Milky
RESIN:	ABS
SPECIFIC GRAVITY:	0.886 ± 0.04
BROOKFIELD VISCOSITY:	Medium Body - Minimum 500 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	325 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2235
- NSF®/ANSI Standards 14 Listed and Certified for Drain Waste and Vent, and Sewer service use (NSF®-DWV,SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code).
- Meets CSA B181.1 (Yellow Only) for non-pressure drainage systems
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- ABS-71 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS ABS71-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Methyl Ethyl Ketone (CAS# 78-93-3); Acetone (CAS# 67-64-1); ABS Resin (CAS# 9003-56-9).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication ABS71-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

ABS-73 BLACK

TECHNICAL SPECIFICATIONS
Low VOC ABS Solvent Cement



PRODUCT:

Spears® ABS-73 BLACK is medium bodied, fast setting, high strength ABS solvent cement for all classes and schedules of ABS pipe and fittings with interference fit through 8".

INTENDED USE:

ABS-73 BLACK is for use on Type I and Type II ABS (Acrylonitrile-Butadiene Styrene) plastic pipe and fittings. Typically used for drain, waste and vent systems (DWV), conduit and sewer applications. See ABS-71 for YELLOW/MILKY color cement.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Black
RESIN:	ABS
SPECIFIC GRAVITY:	0.890 ± 0.04
BROOKFIELD VISCOSITY:	Medium Body - Minimum 500 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	325 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2235
- NSF®/ANSI Standards 14 Listed and Certified for Drain Waste and Vent, and Sewer service use (NSF®-DWV,SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code).
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- ABS-73 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS ABS73-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Methyl Ethyl Ketone (CAS# 78-93-3); Acetone (CAS# 67-64-1); ABS Resin (CAS# 9003-56-9).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication ABS73-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY
ABS TO PVC-94 GREEN
TECHNICAL SPECIFICATIONS
Low VOC ABS To PVC Transition Solvent Cement



PRODUCT:

Spears® ABS TO PVC-94 GREEN is medium bodied, fast setting transition cement for joining ABS to PVC transition joints only in non-pressure systems; all classes and schedules with interference fit through 6" diameter (not for Schedule 80). Not for use in joining either material to itself.

INTENDED USE:

ABS TO PVC-94 GREEN is specifically designed for use on ABS to PVC transition joints in nonpressure systems. Suitable for sewer and DWV applications. Materials joined should be verified; Green color is for transition cement identification. Use standard cements to join either PVC-PVC or ABS-ABS. Consult local code before using inside a building. Apply primer only to PVC material. Do not apply primer on the ABS side of the joint.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Green
RESIN:	PVC
SPECIFIC GRAVITY:	0.927 ± 0.04
BROOKFIELD VISCOSITY:	Medium Body - Minimum 500 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D3138
- NSF®/ANSI Standards 14 Listed and Certified for Drain Waste and Vent, and Sewer service use (NSF®-DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code).
- Not for use in joining either material to itself.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-94 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS ABS to PVC94-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication ABS to PVC94-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY
CLEANER-65 CLEAR

TECHNICAL SPECIFICATIONS
Low VOC Cleaner for PVC, CPVC, ABS and Styrene



PRODUCT:

Spears® CLEANER-65 CLEAR is a water-thin cleaner recommended for use before priming of pipe and fittings to remove dirt, oil and grease from the bonding surfaces of PVC, CPVC, ABS and Styrene.

INTENDED USE:

CLEANER-65 is a general purpose cleaner for all sizes, classes and schedules of PVC, CPVC, ABS and Styrene pipe and fittings. Designed to be used as a cleaner only; appropriate primer and cement must be used. Excellent for cleaning pipe prior to priming or use of a One-Step (without primer) cement.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Clear or Purple
SPECIFIC GRAVITY:	0.800 ± 0.04
BROOKFIELD VISCOSITY:	Water Thin
MAX VOC EMISSIONS:	550 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened. Always seal the can tightly between uses to prevent the solvent from evaporating. Do Not add solvents as this may alter performance of the primer.

CONFORMANCE STANDARDS AND APPROVALS:

- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- CLEANER-65 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

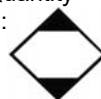
<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS CLEANER65-6 for additional detail.

Proper Shipping Name: Flammable Liquid
n.o.s. (Acetone, Methyl Ethyl Ketone)
Hazard Class: 3
Identification Number: UN 1993
Packing Group: II
Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity
49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication CLEANER65-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

CPVC-24 *EverTUFF*  **GRAY/ORANGE**
Industrial CPVC

TECHNICAL SPECIFICATIONS
Low VOC CPVC Solvent Cement



PRODUCT:

Spears® CPVC-24 GRAY/ORANGE is heavy bodied, medium setting CPVC (suitable for PVC) cement for all classes and schedules with interference fit in all sizes.

- THE ANY TIME, ANYWHERE CEMENT -
CPVC-24 is the Most Versatile, Chemically
Resistant Cement for both CPVC & PVC Systems
for All Sizes, All Conditions.

INTENDED USE:

CPVC-24 is an industrial duty, high-strength, chemical-resistant solvent cement for use with CPVC or PVC piping systems carrying acids, bases, salts, and sodium hypochlorite. Ideal for use in waste water plants. Recommended for use on PVC industrial piping systems for chemical applications; best choice for both PVC and CPVC fume & air duct systems.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Gray or Orange
RESIN:	CPVC
SPECIFIC GRAVITY:	0.984 ± 0.04
BROOKFIELD VISCOSITY:	Heavy Body - Minimum 1600 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Medium
MAX VOC EMISSIONS:	400 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	2 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM F493
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- CPVC-24 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS CPVC24-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); CPVC Resin (CAS# 68648-82-8).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication CPVC24-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

CPVC-29 **EverTUFF** **GRAY/ORANGE**
Industrial CPVC

TECHNICAL SPECIFICATIONS
Low VOC CPVC Solvent Cement



PRODUCT:

Spears® CPVC-29 GRAY/ORANGE is extra-heavy bodied, slow setting CPVC cement for all classes and schedules with interference fit in all sizes.

- THE ANY TIME, ANYWHERE CEMENT -
CPVC-29 is a Versatile, Chemically
Resistant Cement for PVC & CPVC Systems in
All Sizes, All Conditions.

INTENDED USE:

CPVC-29 is an extra-heavy bodied, slow setting gray or orange CPVC cement for all classes and schedules with interference fit through 24" diameter. CPVC-29 is an industrial high-quality solvent cement for applications requiring high gap-filling properties for large diameter fabricated fittings and fume & duct fittings. Recommended for use on PVC or CPVC piping systems in chemical applications.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Gray or Orange
RESIN:	CPVC
SPECIFIC GRAVITY:	0.986 ± 0.01
BROOKFIELD VISCOSITY:	Extra-Heavy Body - Minimum 1600 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Slow
MAX VOC EMISSIONS:	≤490 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	2 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- Meets SCAQMD Rule 1168/316A for Adhesive and Sealant Applications.
- CPVC-29 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS CPVC29-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); CPVC Resin (CAS# 68648-82-8).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication CPVC29-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

CTS-5 **EverTUFF®**  **YELLOW**
Industrial CPVC

TECHNICAL SPECIFICATIONS
Low VOC CPVC Solvent Cement



PRODUCT:

Spears® CTS-5 EverTUFF® YELLOW is a medium bodied, CPVC fast setting cement for copper tube size pipe and fittings with interference fit through 2" diameter.

INTENDED USE:

CTS-5 is specifically formulated and code approved for use in joining CTS CPVC pipe and fittings in Hot & Cold Water Distribution Systems - one-step formulation for use without primer if local code permits.

Maximum 2" size for One - Step use.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Yellow
RESIN:	CPVC
SPECIFIC GRAVITY:	0.982 ± 0.04
BROOKFIELD VISCOSITY:	Heavy Body - Minimum 500 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	400 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	2 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 and Certified for compliance to ASTM F493 and D2846
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- CSA B137.6, B181.2
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- CTS-5 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS CTS5-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); CPVC Resin (CAS# 68648-82-8).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication CTS5-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY



TECHNICAL SPECIFICATIONS
Low VOC CPVC Solvent Cement

PRODUCT:

Spears® FlameGuard® FS-5 RED One-Step (no primer required) CPVC cement specifically formulated and approved for use with Spears® FlameGuard® and other approved CPVC Fire Sprinkler Products with interference fit through 3".

INTENDED USE:

Spears® FS-5 is approved for use with Spears® FlameGuard® and other approved CPVC Fire Sprinkler Products. See publication FG-3, FlameGuard® Installation Instructions for additional application details.

Maximum 3" size for One - Step use.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Red
RESIN:	CPVC
SPECIFIC GRAVITY:	0.985 ± 0.04
BROOKFIELD VISCOSITY:	Heavy Body - Minimum 1600 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	490 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	2 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM F493
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- FM® and UL® approved for use with Spears® FlameGuard® and other approved CPVC Fire Sprinkler Products.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- FS-5 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
Pint	12
Quart	12

The following is general information for ground shipping, see SDS FS-5 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1); CPVC Resin (CAS# 68648-82-8).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

FS-5 is specialty cement; see Spears® publication FG-3, FlameGuard® Installation Instructions, for specific details and limitations. Installation instructions are printed on the can label and instructional information is available on Spears® website at www.spearsmfg.com. Certified Installers Training for FlameGuard® CPVC Fire Sprinkler Systems is also available. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

While CPVC Fire Sprinkler Systems typically are not disinfected, a fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". If required, it is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners and primers.

Refer to Safety Data Sheet (SDS), Spears® publication FS5-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY
LW-5 MUSTARD One-Step for LabWaste®

TECHNICAL SPECIFICATIONS
Low VOC CPVC Solvent Cement



PRODUCT:

Spears® LW-5 MUSTARD is a heavy bodied, one-step (no primer required) CPVC cement specifically formulated and approved for use with Spears® LabWaste® CPVC Corrosive Waste Drainage System Products with interference fit through 24".

INTENDED USE:

LW-5 is the only approved cement for use with Spears® LabWaste® CPVC Corrosive Waste Drainage System Products. See Publication LW-4, LabWaste® CPVC Corrosive Waste Drainage System - Technical Information, for application details.

The Only Chemically Resistant Cement Approved for Spears® LabWaste®

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Mustard
RESIN:	CPVC
SPECIFIC GRAVITY:	0.987 ± 0.04
BROOKFIELD VISCOSITY:	Heavy Body - Minimum 1600 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Medium
MAX VOC EMISSIONS:	400 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	2 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM F493
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- NSF® Certified to ASTM F2618 for Chemical Waste Drainage Systems.
- ICC - ES PMG Listing PMG - 1018 for Spears® LabWaste® CPVC Corrosive Waste Drainage System.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- LW-5 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
Pint	12
Quart	12
Gallon	6
5 Gallon	1

The following is general information for ground shipping, see SDS LW5-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); CPVC Resin (CAS#68648-82-8).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. See Spears® publication, "LW-4, LabWaste® CPVC Corrosive Waste Drainage System" - Technical Information/Installation Guide, for additional information. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication LW5-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY
LX-5 PVC CLEAR Low Extractable
One-Step Cement
TECHNICAL SPECIFICATIONS
PVC Solvent Cement



PRODUCT:

Spears® LX-5 CLEAR Low Extractable One-Step (no primer required) PVC cement is specifically formulated for use with Spears® Low Extractable PVC piping, with interference fit through 6".

INTENDED USE:

Unlike conventional PVC solvent cements, LX-5 contains fewer contaminants and cures quickly to reduce potential for TOC contamination in high purity applications. See Spears® publication **LX-4, Low-Extractable Ultra Pure Water Systems**, for application details.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Clear
RESIN:	PVC
SPECIFIC GRAVITY:	0.907 ± 0.04
BROOKFIELD VISCOSITY:	Regular Body - Minimum 90 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- LX-5 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
Pint	12
Quart	12

The following is general information for ground shipping, see SDS LX5-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. LX-5 is a specialty cement requiring specific attention to installation. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

While system disinfection should not be necessary or even used in Low Extractable PVC piping systems, a fire or explosion may result if dry granular calcium hypochlorite is exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock." Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners and primers.

Refer to Safety Data Sheet (SDS), Spears® publication LX5-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY
MULTIPURPOSE-90 CLEAR

TECHNICAL SPECIFICATIONS
Low VOC Multipurpose Solvent Cement



PRODUCT:

Spears® MP-90 MULTI-PURPOSE CLEAR is medium bodied, fast setting, multi-purpose cement for all classes and schedules with interference fit through 6" diameter, Schedule 80 through 4".

INTENDED USE:

MP-90 MULTI-PURPOSE CLEAR is a high strength cement for PVC and CPVC pressure plus ABS and Styrene low-pressure systems. Can be used with PVC, CPVC, ABS or Styrene piping in irrigation sprinklers, plumbing and conduit applications. Not for use as a transition cement between different materials (i.e., not for PVC-CPVC, PVC-ABS, etc. transitions). Not for applications requiring potable water, DWV or sewer waste listed products per the plumbing and building codes.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Clear
RESIN:	CPVC
SPECIFIC GRAVITY:	0.925 ± 0.04
BROOKFIELD VISCOSITY:	Medium Body - Minimum 500 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	400 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	2 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- Meets performance requirements of ASTM D2564, F493 and D2235.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- MP-90 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/2 Pint	24
Pint	12
Quart	12

The following is general information for ground shipping, see SDS MP90-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1); CPVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication MP90-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

PRIMER21-68 CLEAR /PURPLE

TECHNICAL SPECIFICATIONS
Low VOC Primer for PVC and CPVC



PRODUCT:

Spears® PRIMER21-68 PURPLE/CLEAR is a fast acting primer essential for proper softening and preparation of PVC and CPVC pipe and fitting surfaces.

INTENDED USE:

PRIMER21-68 is produced in Clear or Purple color which provides positive identification that a primer was used (check local code requirements). For use with all types, classes and schedules of PVC and CPVC pipe and fittings.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Clear or Purple
SPECIFIC GRAVITY:	0.851 ± 0.04
BROOKFIELD VISCOSITY:	Water Thin
MAX VOC EMISSIONS:	550 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM F656.
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Certified Lead-Free.
- NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code) – PURPLE ONLY.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PRIMER21-68 primer has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PRIMER68-6 for additional detail.

Proper Shipping Name: Flammable Liquid
n.o.s. (Acetone, Methyl Ethyl Ketone)
Hazard Class: 3
Identification Number: UN 1993
Packing Group: II
Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity
49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS# 109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PRIMER68-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY
PRIMER21-70 INDUSTRIAL GRADE CLEAR/PURPLE

TECHNICAL SPECIFICATIONS
Low VOC Primer for PVC and CPVC



PRODUCT:

Spears® PRIMER21-70 INDUSTRIAL GRADE PURPLE/CLEAR is a premium, industrial strength primer essential for proper softening and preparation of PVC and CPVC pipe and fitting surfaces.

INTENDED USE:

PRIMER21-70 is an industrial grade, aggressive primer for use with all types, classes and schedules of PVC and CPVC pipe and fittings. Produced in Clear or Purple for easy recognition and code compliance. Specially recommended for use on Schedule 80 (150 psi and higher) and large size pipe. Excellent for cold weather applications.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Clear or Purple
SPECIFIC GRAVITY:	0.858 ± 0.04
BROOKFIELD VISCOSITY:	Water Thin
MAX VOC EMISSIONS:	550 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM F656.
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Certified Lead-Free.
- NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code) - PURPLE ONLY.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PRIMER21-70 primer has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PRIMER70-6 for additional detail.

Proper Shipping Name: Flammable Liquid
n.o.s. (Acetone, Methyl Ethyl Ketone)
Hazard Class: 3
Identification Number: UN 1993
Packing Group: II
Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity
49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PRIMER70-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY
PRIMER-75 INDUSTRIAL WET-N-DRY AQUA BLUE

TECHNICAL SPECIFICATIONS
Low VOC Primer for PVC and CPVC



PRODUCT:

Spears® PRIMER-75 INDUSTRIAL DUTY AQUA BLUE WET-N-DRY is fast acting industrial strength primer essential for proper softening and preparation of PVC and CPVC pipe and fitting surfaces.

INTENDED USE:

PRIMER-75 Wet-N-Dry is an industrial grade Aqua-Blue primer specially formulated for wet conditions and quick pressurization in Turf, Agriculture, Pool & Spa applications. For use with all types, classes and schedules of PVC pipe and fittings.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Aqua Blue
SPECIFIC GRAVITY:	0.834 ± 0.04
BROOKFIELD VISCOSITY:	Water Thin
MAX VOC EMISSIONS:	550 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM F656.
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Certified Lead-Free.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PRIMER-75 primer has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PRIMER75-6 for additional detail.

Proper Shipping Name: Flammable Liquid
n.o.s. (Acetone, Methyl Ethyl Ketone)
Hazard Class: 3
Identification Number: UN 1993
Packing Group: II
Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity
49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Acetone (CAS# 67-64-1).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PRIMER75-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY
PRIMER CLEANER-64 CLEAR

TECHNICAL SPECIFICATIONS
Low VOC Primer & Cleaner for PVC and CPVC



PRODUCT:

Spears® PRIMER CLEANER-64 PURPLE is a combination of Cleaner for removing grease, oil and dirt from the bonding surfaces & Primer for softening PVC & CPVC pipe and fitting surfaces for solvent cement welding.

INTENDED USE:

PRIMER CLEANER-64 as a primer penetrates and softens the surface pipe and fittings for bonding. As a cleaner it removes grease, oil and dirt from the bonding surfaces. For use with all types, classes and schedules of PVC and CPVC pipe and fittings.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Clear or Purple
SPECIFIC GRAVITY:	0.814 ± 0.04
BROOKFIELD VISCOSITY:	Water Thin
MAX VOC EMISSIONS:	550 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PRIMER CLEANER-64 primer/cleaner has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

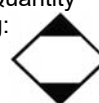
<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS CLEANER64-6 for additional detail.

Proper Shipping Name: Flammable Liquid
n.o.s. (Acetone, Methyl Ethyl Ketone)
Hazard Class: 3
Identification Number: UN 1993
Packing Group: II
Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity
49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication CLEANER64-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

PVC-00 CLEAR

TECHNICAL SPECIFICATIONS
Low VOC PVC Solvent Cement



PRODUCT:

Spears® PVC-00 CLEAR is a regular bodied, fast setting PVC cement for all classes and schedules (except Schedule 80) with interference fit through 4".

INTENDED USE:

PVC-00 CLEAR is excellent for plumbing, DWV, irrigation, electrical conduit, pool & spa and PVC foam core pipe.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Clear or Purple
RESIN:	PVC
SPECIFIC GRAVITY:	0.904 ± 0.04
BROOKFIELD VISCOSITY:	Regular Body - Minimum 90 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-00 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PVC00-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS# 109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PVC00-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

PVC-02 CLEAR

TECHNICAL SPECIFICATIONS
Low VOC PVC Solvent Cement



PRODUCT:

Spears® PVC-02 CLEAR is a regular bodied, fast setting PVC cement for all classes and schedules (except Schedule 80) with interference fit through 4" diameter.

INTENDED USE:

PVC-02 CLEAR Goes on clear, dries clearest and is slightly thicker than PVC-00. Excellent for plumbing, DWV, irrigation, electrical conduit, pool & spa and PVC foam core pipe.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Clear
RESIN:	PVC
SPECIFIC GRAVITY:	0.904 ± 0.04
BROOKFIELD VISCOSITY:	Regular Body - Minimum 90 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-02 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PVC02-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS# 109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PVC02-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

PVC-05 CLEAR / GRAY

TECHNICAL SPECIFICATIONS
Low VOC PVC Solvent Cement



PRODUCT:

Spears® PVC-05 CLEAR or GRAY is Medium bodied, fast setting, PVC cement for all classes and schedules with interference fit through 6" diameter and Schedule 80 through 4" diameter.

INTENDED USE:

PVC-05 CLEAR or GRAY for use in industrial, plumbing, DWV, irrigation, electrical conduit, pool & spa and PVC foam core pipe. Can be used without primer on non-pressure systems if local code permits.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Clear or Gray
RESIN:	PVC
SPECIFIC GRAVITY:	0.960 ± 0.04
BROOKFIELD VISCOSITY:	Medium Body - Minimum 500 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- CSA (Gray Only) B137.3, B181.2
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-05 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PVC05-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackaging this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PVC05-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

PVC-11 GRAY

TECHNICAL SPECIFICATIONS
Low VOC PVC Solvent Cement



PRODUCT:

Spears® PVC-11 GRAY is a heavy bodied, medium setting PVC cement for all classes and schedules with interference fit through 12" diameter.

INTENDED USE:

PVC-11 is high strength industrial duty cement with medium set that allows more working time in warm weather and has good gap filling properties. Excellent for industrial piping systems, plus use with potable water pressure systems, irrigation, conduit, sewer, drain, waste and vent systems.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Gray
RESIN:	PVC
SPECIFIC GRAVITY:	0.966 ± 0.04
BROOKFIELD VISCOSITY:	Heavy Body - Minimum 1600 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Medium
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW) NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- CSA B137.3, B181.2
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-11 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PVC11-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PVC11-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

PVC-17 CLEAR/GRAY

TECHNICAL SPECIFICATIONS
Low VOC PVC Solvent Cement



PRODUCT:

Spears® PVC-17 CLEAR/GRAY is heavy bodied, medium setting PVC cement for all classes and schedules with interference fit through 12" diameter (non-pressure applications only up to 18").

INTENDED USE:

PVC-17 is industrial duty cement with medium set that allows more working time in warm weather and has good gap filling properties. Designed for plumbing, industrial, pool, irrigation and electrical piping systems.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Clear or Gray
RESIN:	PVC
SPECIFIC GRAVITY:	0.963 ± 0.04
BROOKFIELD VISCOSITY:	Heavy Body - Minimum 1600 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Medium
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- CSA (Gray Only) B137.3, B181.2
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-17 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PVC17-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PVC17-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

PVC-19 WHITE/GRAY

TECHNICAL SPECIFICATIONS
Low VOC PVC Solvent Cement



PRODUCT:

Spears® PVC-19 WHITE/GRAY is extra heavy bodied, slow setting PVC cement for all classes and schedules with interference fit through 30" diameter.

INTENDED USE:

PVC-19 is designed for large size piping systems requiring high gap filling properties such as industrial piping and fitting fabrication in pressure and non-pressure applications.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	White or Gray
RESIN:	PVC
SPECIFIC GRAVITY:	0.981 ± 0.04
BROOKFIELD VISCOSITY:	Extra Heavy Body - Minimum 20,000 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Slow
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- CSA (Gray Only) B137.3, B181.2
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-19 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
Pint	12
Quart	12
Gallon (Paint type can)	4
Gallon (F-type can)	6
5-Gallon	1

The following is general information for ground shipping, see SDS PVC19-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PVC19-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

PVC-21 BLUE

TECHNICAL SPECIFICATIONS
Low VOC PVC Solvent Cement



PRODUCT:

Spears® PVC-21 Blue is a medium bodied, fast setting, high strength PVC cement. It is suitable for use on rigid PVC with interference fit Schedule 40 thru 6" and Schedule 80 thru 4".

INTENDED USE:

PVC-21 can be used without primer on PVC Schedule 40 and SDR pressure water piping systems through 4" if local code permits. Do not use PVC-21 without primer in any other application, schedule, or size such as Schedule 80 industrial applications.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Blue
RESIN:	PVC
SPECIFIC GRAVITY:	0.955 ± 0.04
BROOKFIELD VISCOSITY:	Medium Body - Minimum 500 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-21 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PVC21-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PVC21-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY
PVC-25 AQUA BLUE WET-N-DRY
TECHNICAL SPECIFICATIONS
Low VOC PVC Solvent Cement



PRODUCT:

Spears® PVC-25 AQUA BLUE WET-N-DRY: (will fade to CLEAR in sunlight) is medium bodied, very fast setting PVC cement for all classes and schedules with interference fit through 6" diameter and Schedule 80 through 4" diameter.

INTENDED USE:

PVC-25 AQUA BLUE WET-N-DRY is formulated for wet conditions and quick pressurization. Designed for irrigation, plumbing, and pool & spa applications. Can be used without primer on non-pressure systems if local code permits.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Aqua Blue (fades to clear in sunlight)
RESIN:	PVC
SPECIFIC GRAVITY:	0.925 ± 0.04
BROOKFIELD VISCOSITY:	Medium Body - Minimum 500 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Very Fast
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW) NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-25 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PVC25-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Acetone (CAS# 67-64-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PVC25-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

PVC-26 Pool-Pro™ BLUE

TECHNICAL SPECIFICATIONS
Low VOC PVC Solvent Cement



PRODUCT:

Spears® PVC-26 Pool-Pro™ Blue (will fade to CLEAR in sunlight) is medium bodied, very fast setting PVC cement for all classes and schedules with interference fit through 6" diameter and Schedule 80 through 4" diameter.

INTENDED USE:

PVC-26 Pool-Pro™ is specially formulated for pool maintenance and repair - wet or quick pressurization conditions. Can be used without primer on non-pressure systems if local code permits.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Blue (fades to clear in sunlight)
RESIN:	PVC
SPECIFIC GRAVITY:	0.932 ± 0.04
BROOKFIELD VISCOSITY:	Medium Body - Minimum 500 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Very Fast
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-26 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PVC26-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Acetone (CAS# 67-64-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PVC26-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

PVC-27 Cold-N-Hot CLEAR

TECHNICAL SPECIFICATIONS
Low VOC PVC Solvent Cement



PRODUCT:

Spears® PVC-27 COLD-N-HOT CLEAR is medium bodied, very fast setting, PVC cement for all classes and schedules with interference fit through 6" diameter, Schedule 80 through 4" diameter.

INTENDED USE:

PVC-27 COLD-N-HOT is formulated for -15°F to 110°F (-26°C to 43°C) weather conditions. Designed for industrial, plumbing, irrigation, pool & spa, electrical conduit and PVC foam core pipe. Can be used without primer on non-pressure systems if local code permits.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Clear
RESIN:	PVC
SPECIFIC GRAVITY:	0.935 ± 0.04
BROOKFIELD VISCOSITY:	Medium Body - Minimum 500 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Very Fast
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW) NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-27 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PVC27-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

PackingGroup: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PVC27-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

PVC-37 EverTUFF® BLUE

TECHNICAL SPECIFICATIONS
Low VOC PVC Solvent Cement



PRODUCT:

Spears® PVC-37 EverTUFF® BLUE is a reduced VOC emissions, medium bodied, very fast setting, high strength PVC solvent cement for all classes and schedules of pipe and fittings through 8" diameter with interference fit, Schedule 80 through 4" diameter. Fades to clear in sunlight. No primer needed in non-pressure DWV applications unless required by local code.

INTENDED USE:

PVC-37 EverTUFF® BLUE is for use on rigid and flexible PVC pipe and fittings, including well casings and foam core pipe. It is for use with demanding Turf, Agriculture and Well Casing applications. Formulated for wet conditions and quick pressurization. It may also be used in plumbing and other applications.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Blue (fades to clear in sunlight)
RESIN:	PVC
SPECIFIC GRAVITY:	0.933 ± 0.04
BROOKFIELD VISCOSITY:	Medium Body - Minimum 500 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Very Fast
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-37 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PVC37-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Acetone (CAS# 67-64-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PVC37-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

PVC-50 HOT BLUE

TECHNICAL SPECIFICATIONS
Low VOC PVC Solvent Cement



PRODUCT:

Spears® PVC-50 HOT BLUE is a reduced VOC emissions, medium bodied, fast setting, high strength, highly aggressive PVC solvent cement for all classes and schedules of pipe and fittings through 6" diameter with interference fit, Schedule 80 through 4" diameter.

INTENDED USE:

PVC-50 HOT BLUE is excellent for use in challenging conditions including wet, damp or cold temperatures in irrigation, plumbing, DWV, pool & spa, and non-pressure applications. PVC-50 may be used without primer on Schedule 40 pipe and fittings if local code permits.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Blue (fades to clear in sunlight)
RESIN:	PVC
SPECIFIC GRAVITY:	0.965 ± 0.04
BROOKFIELD VISCOSITY:	Medium Body - Minimum 500 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW); NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-50 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PVC50-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PVC50-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

Solvent Cements Technical
Solvent Cement & Primer Technical Specifications



SPEARS® MANUFACTURING COMPANY

PVC-95 Flexible CLEAR/BLUE

TECHNICAL SPECIFICATIONS
Low VOC PVC Solvent Cement



PRODUCT:

Spears® PVC-95 Flexible CLEAR/BLUE is: Medium bodied, fast setting PVC cement specially formulated for use on flex-to-flex and flex-to-rigid PVC connections with interference fit through 6" and Schedule 80 through 3".

INTENDED USE:

PVC-95 Flexible is specially formulated for use on flex-to-flex and flex-to-rigid PVC connections to maintain high-strength, flexible joints.

GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Clear or Blue
RESIN:	PVC
SPECIFIC GRAVITY:	0.945 ± 0.04
BROOKFIELD VISCOSITY:	Medium Body - Minimum 500 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	425 G/L per SCAQMD Rule 1168/316A
SHELF LIFE:	3 years from date stamped on the bottom of container.

Note: Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.

CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM D2564
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW) NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED® Green Building Rating System - Indoor Environmental Quality.
- PVC-95 cement has achieved GREENGUARD GOLD Certification to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
1/4 Pint	24
1/2 Pint	24
Pint	12
Quart	12
Gallon	6

The following is general information for ground shipping, see SDS PVC95-6 for additional detail.

Proper Shipping Name: Adhesive

Hazard Class: 3

Identification Number: UN 1133

Packing Group: II

Label Required: Class 3 Flammable Liquid

Exceptions for Quantities < 1 liter

Classification: Limited Quantity

49CFR172.315 Marking:



Note: Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.



Solvent Cements Technical Solvent Cement & Primer Technical Specifications

SAFETY & USE PRECAUTIONS:

WARNING: CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 79-93-3) Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1); PVC Resin (CAS# 9002-86-2).

FIRST AID

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

INSTALLATION & INSTALLER TRAINING

Installation Instructions are printed on the can label and instructional video or pamphlets are available on Spears® website at www.spearsmfg.com. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Personal instruction training from experienced instructors or installers is advised. Contact Spears® for additional instructional information or formal training.

AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as "pool-shock". It is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners or primers.

Refer to Safety Data Sheet (SDS), Spears® publication PVC95-6, for more information.

LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.