



Spears® Solvent Cement & Primer



ENGINEERING GUIDE

Contact Spears® for any Information not found.



Spears® Low VOC Solvent Cements, Primers & Accessories



Professional grade solvent cements developed for contractors, essential needs in joining PVC, CPVC and ABS pipe and fittings. Available in 1/4 pints, 1/2 pints, pints, quarts, gallons, and 5 gallons according to cement type. Spears® also offers a full assortment of daubers, swabs, rollers, brushes, cans and accessories.

All Low VOC for LEED® Credit

Environmentally friendly. LEED® Compliant (Leadership in Energy and Environmental Design). Credit can be gained through the use of Spears® Low VOC products. This program, developed by the US Green Building Council, uses SCAQMD Rule 1168 as a benchmark to qualify one credit toward LEED® certification for green building. Certified to GREENGUARD GOLD to Underwriters Laboratories (UL) 2818. UL GREENGUARD GOLD Certification allows for LEED® (Leadership in Energy and Environmental Design) credit eligibility.

NSF® Certified & Listed

Listed for use in piping applications such as potable water, turf, irrigation, pool & spa, industrial, plumbing, DWV, and/or sewer plus special applications including fire protection, chemical waste, and ultra-pure water. Certified as applicable to the Uniform Plumbing Code (NSF® U.P.Code) and CSA B181.2 B137.3 requirements - see specific listings.

Certified to ASTM Standards

Certified by NSF International to ASTM D 2564 for PVC Solvent Cements, F 493 for CPVC Solvent Cements, D 2235 for ABS Solvent Cements, D 3138 for ABS To PVC Solvent Cements and F 656 for Primers.

Cements for Specialty Systems

Specialty Cements formulated for special systems such as Copper Tube Size (CTS) Hot & Cold Water Distribution Systems, LabWaste® CPVC Corrosive Waste Drainage Systems, FlameGuard® CPVC Fire Sprinkler Systems, and Low Extractable PVC Ultra High Purity Water Systems.

Plus, special CPVC cements are specially formulated for use with Spears® ABS Type Approved and USCG Approved Pipe & Fittings for Marine Applications.

Cements for Special Applications

Solvent cements specially formulated for a variety of environmental applications. Such as POOL-PRO™ for PVC Pool & Spa applications, Wet-N-Dry for other PVC high moisture conditions, CPVC-24 the most Chemically Resistant cement available for both CPVC & PVC chemical applications, Transition cement for ABS to PVC, Multi-Purpose cement for use on PVC, CPVC, ABS & Styrene, and Hot Blue cement for PVC installation in challenging conditions including wet, damp or cold temperatures requiring rapid set and fast drying.

Notice: One-Step Cements are limited to applicable sizes. See Specific On-Step Cement for limitations.

Progressive Products From Spears® Innovation & Technology



Solvent Cements Technical
Spears® Solvent Cement & Primer

QUICK VIEW SELECTION GUIDE

| Type | Body | Spears®/IPS Cross Reference | | Color | Relative Set | Capacity | Features |
|-------------------------------|-------------------|-----------------------------|----------------------|-----------------|---|---|--|
| | | Spears® | IPS | | | | |
| PVC | Regular | PVC-00 | 700 | Clear | Fast | Schedule 40 - 4" | |
| | | PVC-02 | 702 | Clear | Fast | Schedule 40 - 4" | Dries Clearest, slightly thicker than PVC-00 |
| | Medium | PVC-05 | 705 (Not in Gray) | Clear/ Grey | Fast | All Classes & Schedule 40 - 6" Schedule 80 - 4" | Industrial Duty Primerless Capability ¹ |
| | | PVC-21 | 721 | Blue | Fast | Schedule 40 - 6" Schedule 80 - 4" | Primerless Capability ¹ |
| | Heavy | PVC-11 | 711 | Grey | Medium | All Classes & Schedules - 12" | Industrial Duty |
| | | PVC-17 | 717 | Clear Grey | Medium | All Classes & Schedules - 12" Non-pressure - 18" | Industrial Duty |
| | Extra Heavy | PVC-19 | 719 | White/ Grey | Slow | All Classes & Schedules Requiring High Gap Filling - 30" | Industrial Duty |
| | Specialty Cements | PVC-25 | 725 | Aqua Blue | Very Fast | All Classes & Schedules 40 - 6" Schedule 80 - 4" | Wet-N-Dry Formulations Primerless Capability ¹ |
| | | PVC-26 | 747 | Blue | Very Fast | All Classes & Schedules 40 - 6" Schedule 80 - 4" | POOL-PRO™ Formulation for Pool & Spa Primerless Capability ¹ . Fades to clears as it cures. |
| | | PVC-27 | 727 | Clear | Very Fast | All Classes & Schedules - 40 - 6" Schedule 80 - 4" | Cold-N-Hot Formulation -15°F to 110°F Primerless Capability ¹ |
| | | PVC-37 | 737 | Blue | Very Fast | All Classes & Schedules - 6" Schedule 80 - 4" | Formulated for Wet Conditions Primerless Capability ¹ |
| | | PVC-50 | 750 | Blue | Very Fast | Schedule 40 - 6" Schedule 80 - 4" | HOT PVC Formulated Primerless Capability ¹ |
| | | PVC-95 | 795 | Clear/Blue | Fast | All Classes & Schedule 40 - 6" Schedule 80 - 4" | Flexible PVC for Flex-Flex, Flex-Rigid Joints |
| | | LX-5 | N/A | Clear | Fast | Low Extractable PVC Systems - 6" Not to Exceed 6" | One Step ² Low Extractable, High Purity Cement |
| CPVC | Heavy | CPVC-24 | 724 | Gray/ Orange | Medium | All Classes & Schedules PVC or CPVC - All Sizes | Most versatile, Chemically Resistant Cement for both PVC & CPVC Systems - including Duct - Industrial Duty |
| | | Marine-24 | N/A | Gray | Medium | All Schedules CPVC Marine Pressure Systems 1/2" - 12" For Use In Joining EverTUFF® Marine only | Cement for CPVC Marine Duty Pressure Systems |
| | Specialty Cements | LW-5 | N/A | Mustard | Medium | LabWaste® Drainage Systems - 24" For Use In Joining LabWaste® only | One Step ² Cement-Only LabWaste® System Chemically Approved Cement |
| | | OT-5 | N/A | Mustard | Medium | OceanTUFF™ CPVC Black & Gray Drainage Systems - 12" For Use In Joining OceanTUFF™ only | One-Step ² Cement Only OceanTUFF™ System Chemically Approved Cement |
| | | FS-5 | N/A | Red | Fast | CPVC Fire Sprinkler Systems - Not to Exceed 3" | One-Step ² Cement for all CPVC Fire Sprinkler Systems |
| | | CTS-5 | FlowGuard Gold® | Yellow | Fast | CTS CPVC Systems - Not to Exceed 2" | One-Step ² Cement for all CTS CPVC Systems |
| ABS | Medium | ABS-71 | 771 | Yellow/Milky | Fast | All ABS Classes & Schedules - 8" | |
| | | ABS-73 | 773 | Black | Fast | All ABS Classes & Schedules - 8" | |
| Transition & Multipurpose | Medium | ABS to PVC-94 | 794 | Green | Fast | All Classes & Schedules - 6" (Except Schedule 80) | For ABS-to-PVC Transition Joints |
| | | MULTI-PURPOSE | 790 | Clear | Fast | All Classes & Schedules - 6" Schedule 80 - 4" | For PVC and CPVC pressure ABS and Styrene low-pressure systems |
| Primers & Cleaners | Primer-75 | P-75 | Aqua Blue | | All Classes, Schedules & Sizes; PVC & CPVC | Formulated for Wet Conditions Industrial Duty | |
| | Primer21-70 | P-70 | Purple/Clear | | All Classes, Schedules & Sizes; PVC & CPVC | Industrial Duty | |
| | Primer21-68 | P-68 | Purple/Clear | | All Classes, Schedules & Sizes; PVC & CPVC | | |
| | Cleaner-65 | C-65 | Clear | | All Classes, Schedules & Sizes; PVC & CPVC | For PVC, CPVC, ABS or Styrene | |
| | Primer Cleaner-64 | PC-64 | Purple | | All Classes, Schedules & Sizes; PVC & CPVC | | |








Notes:
 1 = Primerless Capability indicates a cement can be used without primer in certain applications if local code permits. See specific cement information for further restrictions.
 2 = One Step designates a cement specifically designed for use without primer. CTS One Step acceptability depends on local code requirements. CTS = Copper Tube Size,
 ASTM D2846 Hot and Cold Water Distribution System.



Low VOC PVC Cements

Regular, medium, heavy and extra heavy bodied cements are specifically formulated for PVC pipe in virtually every schedule and in sizes with interference fit to 30" diameter.








- Low VOC emissions comply with SCAQMD Rule 1168/316A
- 3-Year Shelf Life

| PVC SOLVENT CEMENTS | Std. Pkg.* | Pipe Size | Set Time | Available Color | Industry Listing | Features |
|---|--|---|-----------------|------------------------|---|--|
|  <p>PVC-00 CLEAR Regular bodied. Excellent for plumbing, DWV, irrigation, electrical conduit pool & spa and PVC foam core pipe.</p> | 1/4 Pint 1/2 Pint Pint Quart Gallon | <ul style="list-style-type: none"> • 4" - All Classes and Schedules (except Schedule 80) | Fast | CLEAR | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code UL 2818 | --- |
|  <p>PVC-02 CLEAR Regular bodied. Excellent for plumbing, DWV, irrigation, electrical conduit pool & spa and PVC foam core pipe.</p> | 1/4 Pint 1/2 Pint Pint Quart Gallon | <ul style="list-style-type: none"> • 4" - All Classes and Schedules (except Schedule 80) | Fast | CLEAR | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code UL 2818 | Dries Clearest slightly thicker than PVC-00 |
|  <p>PVC-05 CLEAR/GRAY Medium bodied. Designed for Industrial, plumbing, DWV, irrigation, electrical conduit pool & spa and PVC foam core pipe.</p> | 1/4 Pint 1/2 Pint Pint Quart Gallon | <ul style="list-style-type: none"> • 6" - All Classes and Schedules • 4" - Schedule 80 | Fast | CLEAR | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code UL 2818 | Industrial Duty Primerless Capability ¹ |
|  <p>PVC-21 BLUE Medium bodied. High strength PVC cement suitable for use on rigid PVC.†</p> | 1/4 Pint 1/2 Pint Pint Quart Gallon | <ul style="list-style-type: none"> • 6" - Schedule 40 • 4" - Schedule 80 | Fast | BLUE | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code UL 2818 | Primerless Capability ¹ |
|  <p>PVC-11 - GRAY Heavy bodied. Medium set allows more working time in warm weather and has good gap filling properties.</p> | 1/2 Pint Pint Quart Gallon | <ul style="list-style-type: none"> • 12" - All Classes & Schedules | Medium | GRAY | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code, CSA B137.3, B181.2 UL 2818 | Industrial Duty |
|  <p>PVC-17 CLEAR/GRAY Heavy bodied. Medium set allows more working time in warm weather and has good gap filling properties. Designed for plumbing, industrial, pool, irrigation and electrical piping systems.</p> | 1/2 Pint Pint Quart Gallon | <ul style="list-style-type: none"> • 12" - All Classes & Schedules • 18" - Non-Pressure | Medium | CLEAR/GRAY | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code (Clear/Gray) UL 2818 CSA B137.3, B181.2 (Gray only) | Industrial Duty |
|  <p>PVC-19 WHITE/GRAY Extra Heavy bodied. Designed for large size piping systems requiring high gap filling properties such as industrial piping and fitting fabrication in pressure and non-pressure applications.</p> | Pint Quart Gallon (F-Type & Paint Type) 5 Gallon | <ul style="list-style-type: none"> • 30" - All Classes & Schedules Requiring High Gap Filling | Slow | WHITE/GRAY | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code UL 2818 CSA B137.3, B181.2 (Gray Only) | Industrial Duty |
| <p>Notes 1 = Primerless Capability indicates a cement can be used without primer in certain applications if local code permits † = Can be used without primer on PVC Schedule 40 and SDR pressure water piping systems if local code permits. Do not use PVC-21 without primer in any other application, schedule, or size such as Schedule 80 industrial applications. * = Contact Spears® for special packaging not listed.</p> | | | | | | |



Solvent Cements Technical

Spears® Solvent Cement & Primer

| PVC SPECIALTY SOLVENT CEMENTS | Std. Pkg.* | Pipe Size | Set Time | Available Color | Industry Listing | Features |
|---|---|--|-----------|-----------------|--|---|
|  <p>PVC-25 AQUA BLUE WET-N-DRY Medium bodied. Formulated for wet conditions and quick pressurization. Designed for irrigation, plumbing, and pool & spa applications.</p> | 1/4 Pint 1/2 Pint Pint Quart Gallon | <ul style="list-style-type: none"> 6" - All Classes and Schedules 4" - Schedule 80 | Very Fast | AQUA BLUE | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code UL 2818 | Wet-N-Dry Formulation Primerless Capability ¹ |
|  <p>PVC-26 POOL-PRO™ BLUE Medium bodied. Formulated specifically for wet conditions in pool & spa applications. Fades to clear as it cures.</p> | 1/4 Pint 1/2 Pint Pint Quart Gallon | <ul style="list-style-type: none"> 6" - All Classes and Schedules 4" - Schedule 80 | Very Fast | BLUE | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code UL 2818 | Pool & Spa Formulation Primerless Capability ¹ |
|  <p>PVC-27 CLEAR COLD-N-HOT Medium bodied. Designed for industrial, plumbing, irrigation, pool & spa, electrical conduit and PVC foam core pipe.</p> | Pint Quart Gallon | <ul style="list-style-type: none"> 6" - All Classes and Schedules 4" - Schedule 80 | Very Fast | CLEAR | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code. UL 2818 | Cold-N-H Formulation -15°F to 110°F Primerless Capability ¹ |
|  <p>PVC-37 EverTUFF® TURF™ BLUE Medium bodied. Designed with slightly higher viscosity for use with demanding Turf, Agriculture and Well Casing applications. Formulated for wet conditions and quick pressurization. Fades to clear in sunlight.</p> | 1/4 Pint 1/2 Pint Pint Quart Gallon | <ul style="list-style-type: none"> 6" - All Classes and Schedules 4" - Schedule 80 | Very Fast | BLUE | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code UL 2818 | Formulated for Wet Conditions Primerless Capability ¹ |
|  <p>PVC-50 HOT BLUE Medium bodied. 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.</p> | 1/4 Pint 1/2 Pint Pint Quart Gallon | <ul style="list-style-type: none"> 6" - Schedule 40 4" - Schedule 80 | Very Fast | BLUE | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code UL 2818 | HOT PVC Formulation Primerless Capability ¹ |
|  <p>PVC-95 CLEAR/BLUE Flexible Medium bodied. Specially formulated for use on flex-to-flex and flex-to-rigid PVC connections. Maintains high-strength, flexible joints.</p> | 1/4 Pint 1/2 Pint Pint Quart Gallon | <ul style="list-style-type: none"> 6" - All Classes and Schedules 3" - Schedule 80 | Fast | CLEAR/ BLUE | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code UL 2818 | Flexible PVC for Flex-Flex, Flex-Rigid Joints |
|  <p>LX-5 CLEAR Low Extractable One-Step Cement. Specifically formulated for use with Spears® Low Extractable PVC piping. Unlike conventional PVC solvent cements, LX-5 contains fewer contaminants and cures quickly to reduce potential for TOC contamination. Maximum 6" size.</p> | Pint Quart | <ul style="list-style-type: none"> 6" - Low Extractable PVC Systems | Fast | CLEAR | ASTM D2564, NSF®-PW, DWV, SW, U.P. Code UL 2818 | One Step ² Low Extractable, High Purity Cement |


Notes
¹ = Primerless Capability indicates a cement can be used without primer in certain applications if local code permits
² = One Step designates a cement specifically designed for use without primer.
 * = Contact Spears® for special packaging not listed.

CPVC Low VOC Cements

Heavy bodied cements are specifically formulated for CPVC plastic pipe and fittings including a variety of One-Step (no primer required) CPVC specialty cements. These products are ideal for use in hot/cold water plumbing systems, water treatment and chemical plants, as well as industrial piping systems.

Notice: One-Step Cements are limited to applicable sizes. See Specific On-Step Cement for limitations.






- Low VOC emissions comply with SCAQMD Rule 1168/316A
- 2-Year Shelf Life

| CPVC SOLVENT CEMENTS | Std. Pkg.* | Pipe Size | Set Time | Available Color | Industry Listing | Features |
|---|---|---|----------|-----------------|--|--|
|  <p>CPVC-24 GRAY/ORANGE Heavy bodied. High-strength, chemical-resistant solvent cement for use with CPVC 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.</p> | 1/4 Pint 1/2 Pint Pint Quart Gallon | <ul style="list-style-type: none"> 24" - All classes and schedules PVC or CPVC - All Sizes | Medium | GRAY/ ORANGE | ASTM F493, NSF®-PW, DWV, SW, U.P. Code UL 2818 | Most Versatile, Chemically Resistant Cement for both CPVC & PVC Systems - including Duct - Industrial Duty |

Notes
 * = Contact Spears® for special packaging not listed.

Solvent Cements Technical
Spears® Solvent Cement & Primer





| CPVC SPECIALTY SOLVENT CEMENTS | Std. Pkg.* | Pipe Size | Set Time | Available Color | Industry Listing | Features |
|--|---|--|-----------------|------------------------|--|--|
|  <p>LW-5 MUSTARD One-Step CPVC cement specifically formulated and approved for use with Spears® LabWaste® CPVC Corrosive Waste Drainage System Products. For use in joining LabWaste® only.</p> | Pint Quart Gallon 5 Gallon | • 24" - LabWaste® Drainages Systems | Medium | MUSTARD | ASTM F493, NSF®-CW, PW, DWV, SW, U.P. Code, ICC-ES PMG UL 2818 | One Step ¹ Cement - Only LabWaste® System Chemically Approved Cement |
|  <p>OT-5 MUSTARD One-Step CPVC cement specifically formulated and approved for use with Spears® OceanTUFF™ ABS Type Approved & USCG Approved CPVC Drainage System Products for the Marine Applications. For use in joining OceanTUFF™ only.</p> | Quart Gallon | • 12" - OceanTUFF™ CPVC Drainages Systems | Medium | MUSTARD | ASTM F493, NSF®-CW, PW, DWV, SW, U.P. Code, ICC-ES PMG UL 2818 | One Step ¹ Cement - Only Approved Cement for use with Spears® OceanTUFF™ |
|  <p>FS-5 RED One-Step CPVC Cement specifically formulated and approved for use with Spears® FlameGuard® and other approved CPVC Fire Sprinkler Products. Maximum 3" size</p> | Pint Quart | • 3" - CPVC Fire Sprinkler Systems | Fast | RED | ASTM F493, NSF®-PW, DWV, SW, U.P. Code, UL® FM® Approved UL 2818 | One Step ¹ Cement for all CPVC Fire Sprinkler Systems |
|  <p>CTS-5 EverTUFF® YELLOW Medium bodied. Cement for copper tube size pipe and fittings. Maximum 2" size for One - Step.</p> | 1/4 Pint 1/2 Pint Pint Quart Gallon | • 4" - All classes and schedules (except Schedule 80) | Fast | YELLOW | ASTM F493/D2846, NSF®-PW, DWV, SW, U.P. Code, CSA B137.6, B181.2 UL 2818 | One Step ¹ Cement for all CTS CPVC Systems |
|  <p>MARINE-24 GRAY Heavy Bodied , High-strength, chemical resistant solvent cement for use with Spears® OceanTUFF™ ABS Type Approved & USCG Approved CPVC Presure Piping System Products for Marine Applications. For use in joining OceanTUFF™ only.</p> | Quart Gallon | • 12" - Schedule 40 or 80 CPVC Marine Pressure Piping Systems CPVC Drainages Systems | Medium | MUSTARD | ASTM F493, NSF®-PW, DWV, SW, U.P. Code UL 2818 | One Step ¹ Cement - Only Approved Cement for use with Spears® OceanTUFF™ |

Notes
1 = One Step designates a cement specifically designed for use without primer. CTS One Step acceptability depends on local code requirements.
CTS = Copper Tube Size, ASTM D2846 Hot and Cold Water Distribution Systems
* = Contact Spears® for special packaging not listed.

ABS Low VOC Cements

ABS cements are specially formulated for rigid ABS pipe and fittings in all classes, schedules and fittings having interference type sockets. These medium-bodied, fast setting cements are used for all classes and schedules with interference fit through 8" diameter in ABS drain, waste and vent systems (DWV), and sewer applications. Do not use primer on ABS pipe and fittings.

- Low VOC emissions comply with SCAQMD Rule 1168/316A
- 3-Year Shelf Life

| ABS SOLVENT CEMENTS | Std. Pkg.* | Pipe Size | Set Time | Available Color | Industry Listing | Features |
|--|---|------------------------------------|-----------------|------------------------|---|-----------------|
|  <p>ABS-71 YELLOW/MILKY Medium bodied. ABS solvent cement for all classes and schedules of pipe and fittings.</p> | 1/4 Pint 1/2 Pint Pint Quart Gallon | • 8" - All ABS Classes & Schedules | Fast | YELLOW/ MILKY | ASTM D2235, NSF®-DWV, SW, U.P. Code CSA (Yellow Only) B181.1 UL 2818 | --- |
|  <p>ABS-73 BLACK Medium bodied. ABS solvent cement for all classes and schedules of pipe and fittings.</p> | 1/4 Pint 1/2 Pint Pint Quart Gallon | • 8" - All ABS Classes & Schedules | Fast | BLACK | ASTM D2235, NSF®-DWV, SW, U.P. Code UL 2818 | --- |

Notes
* = Contact Spears® for special packaging not listed.





Solvent Cements Technical
Spears® Solvent Cement & Primer

ABS to PVC Transition & Multi Purpose Low VOC Cements

Designed for joining PVC, ABS, CPVC and Styrene pipe and fittings; involving both similar materials and transition joints between dissimilar plastic materials.

- Low VOC emissions comply with SCAQMD Rule 1168/316A
- 3-Year Shelf Life






| TRANSITION & MULTI-PURPOSE SOLVENT CEMENTS | | Std. Pkg.* | Pipe Size | Set Time | Available Color | Industry Listing | Features |
|--|--|---|--|----------|-----------------|--|--|
|  | ABS TO PVC-94 ABS-PVC GREEN Medium bodied. Specifically designed for use on ABS to PVC transition joints in non-pressure systems. Suitable for sewer and DWV applications. | 1/4 Pint 1/2 Pint Pint Quart Gallon | • 6" - All Classes & Schedules (Except Schedule 80) | Fast | GREEN | ASTM D3138, NSF®-DWV, SW, U.P. Code UL 2818 | For ABS-to-PVC Transition Joints |
|  | MP-90 MULTI-PURPOSE CLEAR Medium bodied. High-strength cement for PVC and CPVC pressure and on ABS and styrene low-pressure systems. | 1/2 Pint Pint Quart | • 6" - All Classes & Schedules • 6" - Schedule 80 | Fast | CLEAR | Meets ASTM D2564, D2235, & F493 UL 2818 | For PVC and CPVC pressure ABS and Styrene low-pressure systems |

Notes
 * = Contact Spears® for special packaging not listed.

Low VOC Solvent Primers & Cleaners

Primers are used for the surface preparation of plastic pipe and fittings, which is necessary for the proper solvent welding of these materials. Cleaner aids in pre-cleaning to remove oil and grease.

- All Spears® Primers and Cleaners are low VOC products, which are environmentally friendly with lower emissions and reduced odor, surpassing the most stringent regulations and comply with SCAQMD Rule 1168/316A.
- Spears® Primers are certified for use with potable water by NSF International.
- 3-Year Shelf Life

| PRIMERS & CLEANERS | | Std. Pkg.* | Available Color | Industry Listing | Features |
|--|---|---|-----------------|--|---|
|  | PRIMER-75 AQUA BLUE WET-N-DRY Fast acting industrial strength primer essential for proper softening and preparation of PVC and CPVC pipe and fitting surfaces. Formulated for wet conditions and quick pressurization in Turf, Agriculture, Pool & Spa applications. | 1/4 Pint 1/2 Pint Pint Quart Gallon | AQUA BLU | ASTM F656, NSF®-PW, DWV, SW UL 2818 | Formulated for Wet Conditions Industrial Duty |
|  | PRIMER-70 INDUSTRIAL GRADE PURPLE/CLEAR Premium, industrial strength primer essential for proper softening and preparation of PVC and CPVC pipe and fitting surfaces. Specially recommended for use on Schedule 80 (150 psi and higher) and large size pipe. Excellent for cold weather applications. | 1/4 Pint 1/2 Pint Pint Quart Gallon | PURPLE/CLEAR | ASTM F656, NSF®-PW, DWV, SW UL 2818 U.P. Code (Purple Only). | Industrial Duty |
|  | PRIMER-68 PURPLE/CLEAR Essential for proper softening and preparation of PVC and CPVC pipe and fitting surfaces. Choose from Clear or Purple color which provides positive identification that a primer was used (check local code requirements). | 1/4 Pint 1/2 Pint Pint Quart Gallon | PURPLE/CLEAR | ASTM F656, NSF®-PW, DWV, SW UL 2818 U.P. Code (Purple Only) | --- |
|  | CLEANER-65 CLEAR 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. | 1/4 Pint 1/2 Pint Pint Quart Gallon | CLEAR | UL 2818 | For PVC, CPVC, ABS or Styrene |
|  | PRIMER CLEANER-64 PURPLE 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. | 1/4 Pint 1/2 Pint Pint Quart Gallon | PURPLE | UL 2818 | --- |

Notes
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Applicators & Accessories

| | |
|--|--|
|  | <p>Can-Mate Kit: Includes Plastic Carrier Strap and two (2) Can-Mate 150 adjustable Daubers. Provides convenient carrying of 1/2 pint, pint or quart cans of cement and primer. (Part# CM-KIT)</p> |
|  | <p>Can-Mate Daubers: Adjustable Plastic Applicator with Telescoping Stem for use with Standard 1/2 Pint, Pint and Quart Cans. Application Note: 1/2" Diameter for pipe sizes up to 1"; 3/4" Diameter for pipe size to 1-1/2", 1-1/4" Diameter for pipe size 1-1/2" to 3".</p> |
|  | <p>Cap Dauber: Fits 1-3/4" Neck Cans. Size by Dauber Diameter and Can Fitment. Application Note: 3/8" Diameter for pipe sizes to 3/4", 1/2" Diameter for pipe sizes to 1"; 5/8" Diameter for pipe sizes to 1-1/4", 3/4" Diameter for pipe sizes to 1-1/2", 1-1/4" Diameter for pipe sizes 1-1/2" to 3"</p> |
|  | <p>Wire handle Swab: 4" cotton for pipe sizes 6" & larger. (Part# 8020)</p> |
|  | <p>Small-Cap Swab: Fits 1-3/4" Neck Quart Cans (MT-651). 4" length for pipe sizes 3" to 8". (Part# 5020)</p> |
|  | <p>Large-Cap Swab: Fits 2-7/8" Neck Gallon Can (MT-648). For pipe sizes 6" & larger. (Part# 4020)</p> |
|  | <p>Swab with Heavy Handle: For pipe size 6" & larger. (Part# 4520)</p> |
|  | <p>Adjustable Swab: Adjustable Length, Dual Cap design fits Quart & Gallon containers. Bulk pack and Replacement Swabs Available. The swab tip is disposable and swab holder is reusable. A Sturdy easy-to-grip Swab for pipe diameter from 4" through 8", S14108, S14111, S14109, S14112.</p> |
|  | <p>Adjustable Swab Bulk Pack: Swab & Handle Included 24 units per Case.</p> |
|  | <p>Replacement Adjustable Swab (Swabs Only): 4 Swabs per Bag.</p> |
|  | <p>Replacement Adjustable Swab (Swabs Only) - Bulk : 24 Swabs per Case.</p> |



Solvent Cements Technical
Spears® Solvent Cement & Primer

Applicators & Accessories

| | | | | | | | | | | | | | |
|---|--|--------|---------------|--------|---------------|--------|--------|--------|-------|--------|--------|---|---|
|  | <p>Small-Cap Roller: Fits 1-3/4" Neck Quart Cans (MT-651). Replaceable Cover. For pipe size 3" to 6". (Part# 6020)</p> | | | | | | | | | | | | |
|  | <p>Can Roller: Fits Paint Type Quart Can (MT-653). For use with pipe sizes 3" to 6". (Part# 3020)</p> | | | | | | | | | | | | |
|  | <p>Large-Cap Roller: 7" Roller Fits (MT-648) Empty Gallon Wide Mouth Cans - For Pipe Sizes 6" & Larger. (Part# 7020)</p> | | | | | | | | | | | | |
|  | <p>Roller with Heavy Handle: Replaceable Cover for pipe size 6" & larger.</p> <table border="1" data-bbox="1024 650 1225 741" style="float: right;"> <tr> <td>5520</td> <td>4" Length</td> </tr> <tr> <td>6520</td> <td>6" Length</td> </tr> </table> | 5520 | 4" Length | 6520 | 6" Length | | | | | | | | |
| 5520 | 4" Length | | | | | | | | | | | | |
| 6520 | 6" Length | | | | | | | | | | | | |
|  | <p>Roller Replacement Covers: Fits Rollers with Heavy Handles #5520, #6020 & #6520. Sold as Pack of 2, full pack only.</p> | | | | | | | | | | | | |
|  | <p>Cap Brush: For Pint and Quart Cans.</p> <table border="1" data-bbox="655 907 863 998" style="float: right;"> <tr> <td>KD-110</td> <td>4-1/2" Length</td> </tr> <tr> <td>KD-112</td> <td>5-1/2" Length</td> </tr> </table> | KD-110 | 4-1/2" Length | KD-112 | 5-1/2" Length | | | | | | | | |
| KD-110 | 4-1/2" Length | | | | | | | | | | | | |
| KD-112 | 5-1/2" Length | | | | | | | | | | | | |
|  | <p>Acid Brush: Small Utility Brush. (Part# AB-1)</p> | | | | | | | | | | | | |
|  | <p>Standard Empty Cans: 1-3/4" Neck.</p> <table border="1" data-bbox="778 1164 986 1255" style="float: right;"> <tr> <td>MT-656</td> <td>1/4 Pint</td> </tr> <tr> <td>MT-655</td> <td>1/2 Pint</td> </tr> <tr> <td>MT-654</td> <td>Pint</td> </tr> </table> <table border="1" data-bbox="1150 1164 1358 1255" style="float: right;"> <tr> <td>MT-651</td> <td>Quart</td> </tr> <tr> <td>MT-647</td> <td>Gallon</td> </tr> <tr> <td>-</td> <td>-</td> </tr> </table> | MT-656 | 1/4 Pint | MT-655 | 1/2 Pint | MT-654 | Pint | MT-651 | Quart | MT-647 | Gallon | - | - |
| MT-656 | 1/4 Pint | | | | | | | | | | | | |
| MT-655 | 1/2 Pint | | | | | | | | | | | | |
| MT-654 | Pint | | | | | | | | | | | | |
| MT-651 | Quart | | | | | | | | | | | | |
| MT-647 | Gallon | | | | | | | | | | | | |
| - | - | | | | | | | | | | | | |
|  | <p>Large Mouth Empty Cans: 2-7/8" Neck. (Part# MT-648)</p> | | | | | | | | | | | | |
|  | <p>Easy Pour Spout: Fits 1/4 Pint, 1/2 Pint, Pint, Quart, Gallon Can 1-3/4" Neck. (Part# EPS-1)</p> | | | | | | | | | | | | |
|  | <p>Empty Paint Type Cans</p> <table border="1" data-bbox="533 1562 740 1653" style="float: right;"> <tr> <td>MT-652</td> <td>Pint</td> </tr> <tr> <td>MT-653</td> <td>Quart</td> </tr> <tr> <td>MT-650</td> <td>Gallon</td> </tr> </table> | MT-652 | Pint | MT-653 | Quart | MT-650 | Gallon | | | | | | |
| MT-652 | Pint | | | | | | | | | | | | |
| MT-653 | Quart | | | | | | | | | | | | |
| MT-650 | Gallon | | | | | | | | | | | | |
|  | <p>Deburring Tool: Cone Type for PVC, CPVC, ABS, PE & PB pipe from 1/2" through 2". (Part# DEB-2)</p> | | | | | | | | | | | | |

Solvent Cements Technical
Solvent Cemented Joints - Initial Set Schedule, Cure Schedule and Cement Usage Table



The following are basic guidelines and may require adjustment according to application or installation conditions. Certain specialty cements, such as FlameGuard® FS-5, may have different instructions for specific application conditions. Consult appropriate installation instructions for details.

INITIAL SET SCHEDULE: The Initial set schedule is the necessary waiting period before handling newly assembled joints. After initial set, the joint will withstand the stress of a normal installation. In damp or humid weather allow 50% more set time.

Average Initial Set Schedule For Spears® PVC/CPVC Solvent Cements

| Temperature Range | Pipe Sizes 1/2" to 1-1/4" | Pipe Sizes 1-1/2" to 2" | Pipe Sizes 2-1/2" to 8" | Pipe Sizes 10" to 15" | Pipe Sizes 15"+ |
|--------------------|---------------------------|-------------------------|-------------------------|-----------------------|-----------------|
| 60°-100°F/16°-38°C | 2 minutes | 5 minutes | 30 minutes | 2 hours | 4 hours |
| 40°-60°F/5°-16°C | 5 minutes | 10 minutes | 2 hours | 8 hours | 16 hours |
| 0°-40°F/-18°-5°C | 10 minutes | 15 minutes | 12 hours | 24 hours | 48 hours |

JOINT CURE SCHEDULE: The Joint cure schedule is the necessary waiting period before pressurizing newly assembled joints. Follow the schedule carefully. In damp or humid weather or chemical applications, allow a minimum of 50% more cure time.

Average Joint Cure Schedule For Spears® PVC/CPVC Solvent Cements

| Relative Humidity 60% or Less | Cure Time Pipe Sizes 1/2" to 1-1/4" | | Cure Time Pipe Sizes 1-1/2" to 2" | | Cure Time Pipe Sizes 2-1/2" to 8" | | Cure Time Pipe Sizes 10" to 15" | Cure Time Pipe Sizes 15"+ |
|----------------------------------|---|----------------------------|---|----------------------------|---|----------------------------|---------------------------------------|---------------------------------|
| | Up to 160 psi | Above 160 to 370 psi | Up to 160 psi | Above 160 to 315 psi | Up to 160 psi | Above 160 to 315 psi | Up to 100 psi | Up to 100 psi |
| 60°-100°F/16°-38°C | 15 min | 6 hrs | 30 min | 12 hrs | 1-1/2 hrs | 24 hrs | 48 hrs | 72 hrs |
| 40°-60°F/5°-16°C | 20 min | 12 hrs | 45 min | 24 hrs | 4 hrs | 48 hrs | 96 hrs | 6 days |
| 0°-40°F/-18°-5°C | 30 min | 48 hrs | 1 hour | 96 hrs | 72 hrs | 8 days | 8 days | 14 days |

Average Number of Joints PER QUART of Spears® Cement*

| Pipe Diameter | 1/2" | 3/4" | 1" | 1-1/2" | 2" | 3" | 4" | 6" | 8" | 10" | 12" | 15" | 18" | 20" | 24" |
|------------------|------|------|-----|--------|----|----|----|----|----|-----|-----|-----|-----|------|------|
| Number of Joints | 300 | 200 | 125 | 90 | 60 | 40 | 30 | 10 | 5 | 2-3 | 1-2 | 3/4 | 1/2 | 7/16 | 5/16 |

* The number of joints listed are an estimation and should be used as a general guideline only.



Solvent Cements Technical
Solvent Cemented Joints - Initial Set Schedule, Cure Schedule and Cement Usage Table

NOMINAL INCH AND CORRESPONDING NOMINAL MILLIMETER PIPE SIZES

| | | | | | | | | | | | | | | | | | | |
|-----|------|------|----|--------|--------|----|--------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| in. | 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" | 2-1/2" | 3" | 4" | 6" | 8" | 10" | 12" | 14" | 16" | 18" | 20" | 24" |
| mm. | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 160 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |

SPEARS® APPLICATOR SELECTION GUIDE

For proper solvent cement welding of pipe and fittings, the cement applicator must be no less than half the size of the pipe

| DAUBERS | Pipe Diameters | | | | | | | |
|-----------------|----------------|------|-----------|----|--------------------|--------|----|----|
| | 1/4" | 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" | 3" |
| 3/8" Dauber | • | • | • | | | | | |
| 1/2" Dauber | | | • | • | | | | |
| 5/8" Dauber | | | | • | • | | | |
| 3/4" Dauber | | | | | • | • | | |
| 1-1/4" Dauber | | | | | | | • | • |
| ROLLERS & SWABS | | | SIZE | | FOR PIPE DIAMETERS | | | |
| 3020 | | | 3" Roller | | 3" - 6" | | | |
| 6020 | | | 4" Roller | | 3" - 8" | | | |
| 7020 | | | 7" Roller | | 6" + | | | |
| 5520 | | | 4" Roller | | 6" + | | | |
| 6520 | | | 6" Roller | | 6" + | | | |
| 4020 | | | 4" Swab | | 6" + | | | |
| 5020 | | | 4" Swab | | 3" - 8" | | | |
| 4520 | | | 4" Swab | | 6" + | | | |

PRODUCT SHELF LIFE

| Spears® Products | Shelf Life | Spears® Products | Shelf Life |
|--------------------|------------|---------------------|------------|
| Primers / Cleaners | 3 years | CPVC Solvent Cement | 2 years |
| PVC Solvent Cement | 3 years | ABS Solvent Cement | 3 years |