



SOLVENT CEMENT & ACCESSORIES

SOLV-2-0217

Spears® Low VOC Solvent Cements, Primers & Accessories

Spears® is Your Single Source Manufacturer of Plastic Pipe, Fittings, Valves, & Solvent Cements



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.

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 F656 for Primers.

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.

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 One-Step Cement for limitations

Only Spears® Offers a **Lifetime Warranty** on Joints Properly Made with Spears® Cements & Primers

Progressive Products From Spears® Innovation & Technology

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/Gray	Fast	All Classes & Schedule 40 - 6" Schedule 80 - 4"	<i>Industrial Duty</i> Primerless Capability ¹
		PVC-21	721	Blue	Fast	Schedule 40 - 6" Schedule 80 - 4"	Primerless Capability ¹
	Heavy	PVC-11	711	Gray	Medium	All Classes & Schedules - 12"	<i>Industrial Duty</i>
		PVC-17	717	Clear/Gray	Medium	All Classes & Schedules - 12" Non-pressure - 18"	<i>Industrial Duty</i>
	Extra Heavy	PVC-19	719	White/Gray	Slow	All Classes & Schedules Requiring High Gap Filling - 30"	<i>Industrial Duty</i>
	Specialty Cements	PVC-25	725	Aqua Blue	Very Fast	All Classes & Schedule 40 - 6" Schedule 80 - 4"	Wet-N-Dry Formulation Primerless Capability ¹
		PVC-26	747	Blue	Very Fast	All Classes & Schedule 40 - 6" Schedule 80 - 4"	POOL-PRO™ Formulation for Pool & Spa Primerless Capability ¹ . Fades to clear as it cures.
		PVC-27	727	Clear	Very Fast	All Classes & Schedule 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 Formulation 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 - 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 CPVC & PVC Systems - including Duct - <i>Industrial Duty</i>
	Specialty Cements	MARINE-24	N/A	Gray	Medium	For use in Joining Spears® ABS Type Approved and USCG Approved Pressure Pipe & Fittings for Marine applications	- <i>Industrial Duty</i>
		LW-5	N/A	Mustard	Medium	LabWaste® CPVC 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	For use in Joining Spears® ABS Type Approved and USCG Approved OceanTUFF™ CPVC Drainage Pipe & Fittings for Marine Applications	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 and Spears® USCG Approved CTS 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-90	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 <i>Industrial Duty</i>
		Primer-70	P-70	Purple/Clear		All Classes, Schedules & Sizes PVC & CPVC	<i>Industrial Duty</i>
		Primer-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 Systems.

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.	1/2 Pint Pint Quart Gallon	• 6" – All Classes & Schedules (Except Schedule 80)	Fast	GREEN	ASTM D3138, NSF®-DWV, SW, U.P. Code	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	For PVC and CPVC 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 BLUE	ASTM F656, NSF®-PW, DWV, SW	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 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 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	---	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	---	---

Notes
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Solvent Cemented Pipe 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		
Temperature range during assembly and cure periods								
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

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" +					
8020		4" Swab		6" +					
S14108		4" Adjustable Swab		4" - 8"					

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



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