

SECTION 8

Latex Bonding Agents / Additives

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TECHNICAL DATA SHEET

THREE TYPES

- **ACRYLIC**
- **POLYVINYL ACETATE [PVA]**
- **ETHYLVINYL ACETATE [EVA]**

ACRYLIC BONDING AGENT J40

- Non re-emulsifiable
- Interior / exterior applications
- Bonding agent and admixture
- Excellent bond strengths

PVA BONDING AGENT J41

- Re-emulsifiable
- Use where water exposure is only intermittent or inconsequential
- Bonding agent and admixture
- Very good bond strengths

LEVEL PRIMER J42

- Re-emulsifiable
- Specifically for use with the Levelayers
- Reduces pinholes in levelers
- Increases bond between the levelers and substrate
- Dilute 1:1 except for non-absorptive surfaces, then use undiluted

LEVEL PRIMER J42RTU

- Re-emulsifiable
- Specifically for use with the Levelayers
- Reduces pinholes in levelers
- Increases bond between the levelers and substrate
- Ready to use, no dilution required

TECHNICAL DATA SHEET

DESCRIPTION

A ready to use, non-reemulsifiable acrylic admixture and bonding agent designed to improve the adhesion and durability of concrete, masonry, stucco, terrazzo and portland cement-sand mixes to horizontal and vertical concrete and other surfaces.

USE

Acrylic Bonding Agent J40 is an excellent acrylic latex emulsion used for bonding new to new or new to old concrete in interior or exterior applications. Acrylic Bonding Agent J40 is extremely effective when used as an admixture with cementitious products such as patching compounds, masonry coatings, cement plasters, and masonry mortars. As an admixture, it not only promotes a strong bond, but also improves the curing, long term durability and resistance to moisture and cracking of the finished product

FEATURES

- Excellent bonding agent with superior adhesive strength
- Non-reemulsifiable
- As an admixture - dramatically increases durability, moisture resistance, adhesion, and curing
- Interior/exterior applications
- Improves freeze/thaw resistance for mortars, patches and cement based coatings
- V.O.C. Compliant

PROPERTIES

ASTM C 1042

Bond Strength of Latex Systems Used with Concrete - Type 2

Test Age	Bond Strength
14 days	1,865 psi (12.9 MPa)
28 days	2,436 psi (16.8 MPa)

ASTM C 1059 - Latex Agents for Bonding Fresh to Hardened Concrete - Type 2

Note: The data shown is typical for controlled laboratory conditions. Reasonable variation from these results can be expected due to interlaboratory precision and bias. When testing the field mixed material, other factors such as variations in mixing, water content, temperature and curing conditions should be considered.

VOC

14 g/L. Compliant with all US VOC regulations including Federal EPA, OTC, LADCO, SCAQMD & CARB.

ESTIMATING GUIDE

Coverage, as a bonding agent, surface applied: 200-300 sq. ft./gallon (4.9-7.4 sq m/L). Surface texture will influence final coverage rates.

As an admixture: replaces 1 to 3 parts of water in a cement based material mixture.

PACKAGING

ITEM #	PACKAGE	SIZE	
		Gallons	Liters
69082	(4/case)	1	3.78
69081	Pail	5	18.93
69080	Drum	55	208.20

STORAGE

Acrylic Bonding Agent J40 should be stored in tightly sealed original factory containers in a horizontal position to prevent moisture accumulation on the drum head. Keep from freezing. The shelf life of a properly stored unopened container is 18 months.

APPLICATION

Surface Preparation: The surface should be clean, sound and free of dirt, oil, grease, paint, curing compounds and form release agents. All loose materials and deteriorated concrete should be removed. For increased performance, concrete surfaces should first be abraded using sandblasting, shotblasting or other mechanical means. Follow ICRI guidelines for proper surface preparation and proper profile requirements.

Mixing: Acrylic Bonding Agent J40 should be thoroughly mixed prior to application. Do not thin or dilute when used as a direct to substrate applied bonding agent. For admixtures, dilute Acrylic Bonding Agent J40 with the appropriate amount of water and gently stir prior to using.

Placement: Bonding Agent: Apply directly from the container over a saturated-surface-dry (SSD) substrate with brush, roller or sprayer, forming a thin, continuous film. Immediately apply cementitious materials that will interlock with the structure. Do not allow Acrylic Bonding Agent J40 to dry prior to cementitious product's application.

Acrylic Bonding Agent J40 can be mixed with neat cement to a brushable consistency and applied to dampened concrete as a surface applied bond coat for concrete toppings. Use the

Bonding Agent

Acrylic Bonding Agent J40 diluted 1 to 1 with water and mix with cement to a stiff, yet brushable consistency. Do not mix too thinly or reduced strengths will result. Apply mixture to clean, sound, profiled & pre-dampened SSD conditioned substrate. Install topping while bond coat is still wet.

Bonding Admixture: Acrylic Bonding Agent J40 can be diluted with up to 3 parts of potable water. For increased performance and durability, mix the Acrylic Bonding Agent J40 at a 2:1 or 1:1 ratio. For use as an admixture with Dayton Superior repair mortars, refer to the repair mortars data sheet for instructions. Blend the Acrylic Bonding Agent J40 with the appropriate amount of water, then measure out the correct amount of the diluted Acrylic Bonding Agent J40 for the cement based material being mixed. Do not over water cement based mixes as lower strengths will result. Do not over mix or use high speed mixing equipment. Typical application steps will be to 1st bring the substrate to a pre-dampened SSD condition, followed by application of a scrub coat of the cement based material blended with the diluted Acrylic Bonding Agent J40. The mixed material is then placed onto the scrub coat while the scrub coat is still wet.

Curing: After initial set of cement based materials, cure in accordance with industry standards or per the cement based material manufacture's recommendations, especially in rapid drying conditions.

CLEAN UP

Tools and equipment use clean, soapy water

LIMITATIONS

FOR PROFESSIONAL USE ONLY

Do not apply over frozen surfaces.

Do not apply to slick surfaces.

Not recommended for use as an additive in air entrained concrete.

Do not apply where excessive hydrostatic pressure is present.

Acrylic Bonding Agent J40 is not recommended as a waterproofing agent.

After application, protect Acrylic Bonding Agent J40 film from dirt and other job site contaminants.

Do not allow Acrylic Bonding Agent J40 to dry prior to cementitious product's application

Surface and ambient temperatures must be a minimum of 40°F (4°C). Maintain 40°F (4°C) as a minimum temperature for 48 hours

PRECAUTIONS

READ MSDS PRIOR TO USING PRODUCT

- Use with adequate ventilation
- Wear protective clothing, gloves and eye protection (Goggles, Safety Glasses and/or Face Shield)
- Keep out of the reach of children
- Do not take internally
- In case of ingestion, seek medical help immediately
- May cause skin irritation upon contact, especially prolonged or repeated. If skin contact occurs, wash immediately with soap and water and seek medical help as needed
- If eye contact occurs, flush immediately with clean water and seek medical help as needed
- Dispose of waste material in accordance with federal, state and local requirements

MANUFACTURER

Dayton Superior Corporation
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Customer Service: 888-977-9600
Technical Services: 866-329-8724
Website: www.daytonsuperior.com

WARRANTY

Dayton Superior Corporation ("Dayton") warrants for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Dayton, the product is free of manufacturing defects and conforms to Dayton's product properties in force on the date of acceptance by Dayton of the order. Dayton shall only be liable under this warranty if the product has been applied, used, and stored in accordance with Dayton's instructions, especially surface preparation and installation, in force on the date of acceptance by Dayton of the order. The purchaser must examine the product when received and promptly notify Dayton in writing of any non-conformity before the product is used and no later than 30 days after such non-conformity is first discovered. If Dayton, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Dayton officer is authorized to modify this warranty. The information in this data sheet supersedes all other sales information received by the customer during the sales process. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.

Dayton shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for loss of sales, revenues or profits; cost of capital or funds; business interruption or cost of downtime, loss of use, damage to or loss of use of other property (real or personal); failure to realize expected savings; frustration of economic or business expectations; claims by third parties (other than for bodily injury), or economic losses of any kind; or for any special, incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform, its obligations under any contract for sale of product, even if Dayton could foresee or has been advised of the possibility of such damages. The Parties expressly agree that these limitations on damages are allocations of risk constituting, in part, the consideration for this contract, and also that such limitations shall survive the determination of any court of competent jurisdiction that any remedy provided in these terms or available at law fails of its essential purpose.

TECHNICAL DATA SHEET

DESCRIPTION

PVA Bonding Agent J41 is a concentrated reemulsifiable/rewettable polyvinyl acetate (PVA) emulsion for use as a bonding agent for application on concrete, cement board or masonry prior to installing patches, mortars, stucco and plaster

USE

PVA Bonding Agent J41 is a PVA emulsion that can be used for bonding new to new or new to old concrete in interior horizontal or vertical applications or exterior vertical applications. PVA Bonding Agent J41 is excellent for use on concrete or cement board prior to plastering, in bonding mortar beds for setting tile or terrazzo or other areas where a reemulsifiable/rewettable surface applied bonding agent is desired. Do not use where frequent exposure to water is possible.

FEATURES

- Reemulsifiable/rewettable
- Excellent bonding agent/superior adhesive strength
- Can be used when there is a delay between primer application and subsequent topping or coating
- Concentrated formula

PROPERTIES

Meets ASTM C 1042 and ASTM C 1059 Type 1
Drying Time: 1-2 hours at 72°F (22°C)

VOC

(0) g/L. Compliant with all US VOC regulations including Federal EPA, OTC, LADCO, SCAQMD & CARB.

ESTIMATING GUIDE

Coverage: 150 to 300 sq. ft. /gal. (3.7 to 7.4 sq. m /L) after proper dilution.

Surface texture and porosity will effect actual coverage rate.

PACKAGING

ITEM #	PACKAGE	SIZE	
		Gallons	Liters
69112	(4/case)	1	3.78
69111	Pail	5	18.93
69305	Drum	55	208.20

STORAGE

PVA Bonding Agent J41 should be stored in tightly sealed original factory containers in a horizontal position to prevent moisture accumulation on the drum head. Keep from freezing. The shelf life of a properly stored unopened container is 12 months.

APPLICATION

Surface Preparation: The surface should be clean, sound and free of dirt, oil, grease, paint, curing compounds and form release agents. All loose materials and deteriorated concrete should be removed. For increased performance, concrete surfaces should first be abraded using sandblasting, shotblasting or other mechanical means.

Mixing: PVA Bonding Agent J41 is to be diluted with equal parts (1:1 ratio) of water prior to use. PVA Bonding Agent J41 should be gently and thoroughly mixed prior to and after dilution.

Placement: Coat surface with PVA Bonding Agent J41 mixed with an equal volume of water evenly without ponding or puddles with a brush, broom, roller or spray. Apply topping or new concrete finish after PVA Bonding Agent J41 is dry to the touch. Protect installed material from getting wet or contaminated. Recoat any areas not covered within a 9 day period.

CLEAN UP

Tools and Equipment use: Clean water

LIMITATIONS

FOR PROFESSIONAL USE ONLY

Not for use in wet environments, including exterior horizontal substrates, in or around swimming pools, showers, decks, below grade or retaining walls that may be subject to hydrostatic pressures, sidewalks, or parking ramps.

Do not apply onto water soluble substrates

Do not apply on frozen or frost covered substrates

Maintain 45°F (7°C) as a minimum surface and ambient temperature for 48 hours. Low temperatures or high humidity will extend curing time.

Do not allow stored product to freeze.

Bonding Agent

PRECAUTIONS

READ MSDS PRIOR TO USING PRODUCT

- Use with adequate ventilation
- Wear protective clothing, gloves and eye protection (Goggles, Safety Glasses and/or Face Shield)
- Keep out of the reach of children
- Do not take internally
- In case of ingestion, seek medical help immediately
- May cause skin irritation upon contact, especially prolonged or repeated. If skin contact occurs, wash immediately with soap and water and seek medical help as needed
- If eye contact occurs, flush immediately with clean water and seek medical help as needed
- Dispose of waste material in accordance with federal, state and local requirements

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WARRANTY

Dayton Superior Corporation ("Dayton") warrants for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Dayton, the product is free of manufacturing defects and conforms to Dayton's product properties in force on the date of acceptance by Dayton of the order. Dayton shall only be liable under this warranty if the product has been applied, used, and stored in accordance with Dayton's instructions, especially surface preparation and installation, in force on the date of acceptance by Dayton of the order. The purchaser must examine the product when received and promptly notify Dayton in writing of any non-conformity before the product is used and no later than 30 days after such non-conformity is first discovered. If Dayton, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Dayton officer is authorized to modify this warranty. The information in this data sheet supersedes all other sales information received by the customer during the sales process. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.

Dayton shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for loss of sales, revenues or profits; cost of capital or funds; business interruption or cost of downtime, loss of use, damage to or loss of use of other property (real or personal); failure to realize expected savings; frustration of economic or business expectations; claims by third parties (other than for bodily injury), or economic losses of any kind; or for any special, incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform, its obligations under any contract for sale of product, even if Dayton could foresee or has been advised of the possibility of such damages. The Parties expressly agree that these limitations on damages are allocations of risk constituting, in part, the consideration for this contract, and also that such limitations shall survive the determination of any court of competent jurisdiction that any remedy provided in these terms or available at law fails of its essential purpose.