



Product Description

Poly-Caulk® JS-45 is a self-leveling, 100% solids, two-component modified polyurea-based elastomeric joint sealant. Poly-Caulk® JS-45 is a flexible material that is designed for 25% movement of an installed joint width. A minimum of 28 days is recommended for concrete to effectively cure prior to installing joint filler or joint sealant.

Features

- 100% Solids
- Cures from -20°F to 130°F (-29°C to 54°C)
- Exceptional Elongation
- No Toxic Vapor, Odorless
- No VOCs
- Remains Flexible in Cold Temperatures
- Resists Jet Fuel
- USDA/FSIS approved

Typical Uses

Poly-Caulk® JS-45 is designed to seal cracks, contraction joints, and control joints on new or old horizontal concrete surfaces. It can be applied on slabs where rapid turn around and return to use is needed because of how quickly the product cures. Poly-Caulk® JS-45's memory capability allows for normal joint movement and accommodates slab movement where designed movement and thermal cycling will occur.

NOTE: Joints should be designed and prepared according to industry standards when using Poly-Caulk® JS-45. In order to achieve optimum movement, sealant depth should be ½ the sealant width—under no circumstances should the depth be greater than 1 inch in any joint configuration.

- Balcony Decks
- Bridge Decks
- Industrial Facilities
- Parking Decks
- Roofing
- Sidewalks
- Water and Waste Water Treatment

Packaging

600 ml-Cartridge: 300 ml Side-A 300ml Side-B packaged as a dual tube cartridge. Cartridges sold in cases of 4 or 10.

10-Gallon Kit: one 5 gallon (18.9 liter) pail of Side-A and one 5 gallon (18.9 liter) pail Side-B

Color

Concrete Grey

Coverage

The figures are estimated coverage rates and can vary on the joint conditions. The above numbers a lot for 10% material waste due to overfilling.

Mixing

Poly-Caulk® JS-45 requires machine dispensing: use a 1:1 ratio pump with or without heater

Technical Data (Based on Draw Down Film)

| | |
|--|---|
| Mix Ratio by Volume | 1A : 1B |
| Specific Gravity, Side-A | + 0.1 |
| Side-B | + 0.1 |
| VOC | 0% |
| Gel Time, ASTM D1640 | 2-3 minutes |
| Pot Life, ASTM D1640 | 3-4 minutes |
| Tack-Free Time, ASTM D1640 at 77°F (25°C), 50% R.H. | <5 minutes |
| Open to Foot Traffic, ASTM D1640 | 2 hours |
| Hardness, ASTM D2240 | 43-45 Shore A |
| Tensile Strength, ASTM D638, Type IV | 250-380 ± 50 psi 1.72-2.62 ± 0.3 MPa |
| Elongation, ASTM D638, Type IV | 350-500 ± 50% |
| Tear Strength, ASTM D624 | 75-85 ± 5 pli 13.1-14.9 ± 0.8 kN/m |
| Tabor Abrasion, mg wt. loss (1000 g, 1000 revs, H-18), ASTM D4060 | 20-75 |
| Total Solids by Weight, ASTM D2369 | 100% |
| Total Solids by Volume, ASTM D2697 | 100% |

| | | Linear Feet Per Gallon | | | |
|----------------|------|------------------------|------|------|----|
| | | Width of Joint | | | |
| Depth of Joint | | 1/4" | 1/2" | 3/4" | 1" |
| | 1/4" | 249 | 138 | 92 | 64 |
| | 1/2" | 138 | 69 | 45 | 34 |
| | 3/4" | 92 | 45 | 30 | 23 |
| | 1" | 64 | 34 | 23 | 17 |

| | | Linear Feet Per 600 ml | | | |
|----------------|------|------------------------|------|------|----|
| | | Width of Joint | | | |
| Depth of Joint | | 1/4" | 1/2" | 3/4" | 1" |
| | 1/4" | 32 | 24 | 16 | 11 |
| | 1/2" | 24 | 11 | 8 | 6 |
| | 3/4" | 16 | 8 | 5 | 3 |
| | 1" | 11 | 6 | 3 | 2 |

The values stated in this technical data sheet are produced under controlled laboratory conditions.

Application

Performance and adhesion are directly related to preparation. Prior to installation the joint sidewalls must be freshly abraded with a clean-out saw equipment with a diamond blade and then vacuumed clean to exposing clean, dust free edges to maximize adhesion. For rough or broom finished concrete it is recommended to avoid overfilling the joint as shaving could be difficult. For smooth non-densified concrete, a stain prevention product / method should be considered to prevent etching.

Material Installation Temperature: 70°F or greater (21°C)

Exposure Temperature: -40°F to 200°F (-40°C to 93.3°C)

Cleanup

Cured product may be disposed of without restriction. Mix excess Side-A with Side-B material and allow to cure. Check local, state and federal laws before disposing of material.

Storage

Poly-Caulk® JS-45 should be stored at room temperature, 60-95°F (15-35°C).

Poly-Caulk® JS-45 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

Safety

For in-depth information on product safety and precautions, please review the product SDS sheets. Prior to using the product, ensure that you have the proper personal protection equipment (PPE) available. This includes but is not limited to the following items:

- Safety Glasses With A Splash Shield
- Minimum Organic Cartridge Respirator
- Rubber or Nitrile Gloves
- Disposable or Reusable Long Sleeve Overalls
- Rubber or Leather Boots

Always Be Sure to Follow The Precautions Listed Below

When Using the Material:

- Do Not Use Near High Heat or Open Flame
- Do Not Take Internally
- Keep Out of Reach of Children

Limitations

Poly-Caulk® JS-45 is not recommended for use under non-resilient or polymer flooring systems. Do not use on slopes greater than 15%. With the exception of small random cracks, backer rod (open cell) should be used in all joints. Be aware

that discoloration from exposure to ultraviolet light can occur, but physical properties will remain unaffected

Warning

This product contains Isocyanates and Curatives.

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