

Product Description

JES Seal is a high solids, spray-applied, aliphatic polyaspartic polyurea with excellent retention, gloss and UV stability characteristics. It can be applied at a thickness of 8-12 mils (200-300 microns) in a single pass on horizontal surfaces or multiple passes on vertical surfaces. JES Seal is quick curing and specifically formulated to be installed in thin film applications.

Features

- Abrasion Resistant
- Anti-Fungal and Biocide (with additive available)
- Color Stable
- Excellent Weatherability
- High Tensile Strength
- Quick Cure
- Topcoat Over Aromatic Polyurea, Polyurethane and Epoxy Applications
- USDA Approved for Incidental Food Contact
- UV Resistant for Superior Gloss Retention
- Very Durable

Typical Uses

- Chemical Plants
- Cold Storage Areas
- Concrete
- Fertilizer Plants
- Food Processing Areas
- Industrial Warehouses
- Off-Shore Oil Platforms
- Pipeline Barges
- Plastic
- Plywood
- Pulp and Paper Mills
- Steel

Packaging

2-gallon kit 1 gallon (3.78 liters) can Side-A and 1 gallon (3.78 liters) can Side-B

10-gallon kit Not an in-stock item and is available with advanced notice. Contact JES Supply Co. for availability

Color

Clear, Tan, White and Dolphin Grey. Custom Colors are available, but a minimum of 100 gallons (378 liters) is required.

Technical Data (Based on Draw Down Film)

	JES Seal 7000 Clear	JES Seal 7000 Pigmented
Mix Ratio by Volume	1A: 1B	1A: 1B
Coverage Rate	1 gal/100 sqft (0.41 l/sqm)	1 gal/100 sqft (0.41 l/sqm)
Dry Film Thickness per Coat	15±2 mils 381 ± 50µ	15±2 mils 381 ± 50µ
Pot Life @ 75°F (24°C), 50% R.H.	25-30 minutes	25-30 minutes
Hardness, ASIM D2240	65 ± 5 Shore D	65 ± 5 Shore D
Tear Resistance, ASTM D624	450 ± 50 pli 78.8 ± 8.8 kN/m	400 ± 20 pli 70.1 ± 8.8 kN/m
Tensile Strength, ASTM D412	3000 ± 200 psi 20.7 ± 1.4 MPa	3000 ± 200 psi 20.7 ± 1.4 MPa
Ultimate Elongation, ASTM D412	70 ± 10%	70 ± 10%
Specific Gravity Side A Side B	1.14±0.1 1.06 ± 0.1	1.14±0.1 1.28 ± 0.1
Total Solids by Weight, ASTM D2669	90±2%	91±2%
Total Solids by Volume, ASTM D2697	91±2%	91±2%
Viscosity at 75°F (24°C), SideA SideB	300 ± 100 cps 1000 ± 300 cps	300 ± 100 cps 1400 ± 300 cps
Volatile Organic Compounds, ASTM D2369-81	0 lb/gal 0 gm/liters	0 lb/gal 0 gm/liters

Coverage

The approximate coverage is 1 gallon/100 sqft (0.4 l/sqm). Coverage rate will depend on surface roughness and porosity.

Surface Preparation

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust and other foreign material to ensure adequate adhesion.

Refer to product General Guidelines for detailed surface preparation information.

Minimum recommended surface preparation:

METAL:

SSPC-SP6/NACE 3, 2 mils (50 microns) profile.

CONCRETE & MASONRY:

SSPC-SP13/NACE 6 or ICRI No. 310.2 CSP 3-5. Primer required.

Mixing

JES Seal may not be diluted under any circumstance. Proportions are premeasured. JES Seal Side-A and Side-B should be mixed individually before combining. Add Side-B to Side-A while mixing, using a mechanical mixer at medium speed. Mix until a homogeneous mixture and color is attained (at least 5 minutes) and mix frequently during application to maintain uniform color. Do not thin. Do not mix in an up and down motion.

Use care to scrape the sides of the container to ensure that no unmixed material remains.

Use caution not to whip air into the material as this may result in pinhole blisters and/or shortened pot life. Do not mix any material that cannot be used within 20-30 minutes.

Application

JES Seal can be applied by phenolic resin core roller, plural component high pressure spray or through a Pressure Pot. JES Seal should be applied at a minimum film thickness of 5 mils (127 microns). It should be noted that the heavier the application, the longer the curing process takes.

For best results, use an airless sprayer. A phenolic resin core roller may be used, but extra care should be taken not to cause air bubbles.

Curing

At 75° F (24°C) and 50% relative humidity, allow each coat to cure 3-4 hours. Cure time will vary depending on temperature and humidity.

Allow 6 hours before permitting light pedestrian traffic and at least 24-48 hours before permitting heavy pedestrian traffic on to the finished surface.

Uncured JES Seal is very sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application. If more than 12 hours passes between coats,

reprime the surface with JES Prime after applying clear coat of Polyaspartic, then re-prime surface with JES Prime and apply JES Seal pigmented coat. If clear coat is required, then clear coat should be applied only after pigmented coat. If clear coat is applied after primer, the primer will become yellowish with exposure to light and surface will look not aesthetically pleasing.

Low temperature and/or low humidity extend the cure time.

Cleanup

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

Storage

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

Limitations

The following conditions must not be coated with JES Supply coatings or systems: split slabs, buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, magnesite, and non-structural lightweight concrete. On grade slabs may receive JES Supply system coatings provided a moisture-vapor transmission test is first performed. Please contact JES Supply technical department with the results.

With regard to coating asphalt surfaces, please contact JES Supply technical department.

Surfaces must be dry, clean and free of foreign matter. Clear coating may turn opaque and cloudy due to moisture penetration, especially in exterior applications. Surface may be slippery when wet. Containers that have been opened must be used as soon as possible. Do not dilute under any circumstance.

Warning

This product contains Isocyanates.

Limited Warranty: Please read all information in the General Guidelines, Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. These products are for professional use only and preferably applied by professionals who have prior experience with the JES Supply Products materials or have undergone training in application of JES Supply Products materials. Published technical data and instructions are subject to change without notice. Contact your local JES Supply Products representative or visit our website for current technical data, instructions and project specific recommendations.

JES Supply Co. warrants its products to be free of manufacturing defects and that they will meet JES Supply Co. products' current published physical properties. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by JES Supply Co. of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. JES Supply Co. products shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. JES Supply Co. products shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. JES Supply Co. reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor or applicator.

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