Product Data Sheet ACRYLITHANE™ DTM URETHANE 646JB



646JB: Base 646J9: Curing Agent 941JB

Description: ACRYLITHANE™ DTM POLYURETHANE is a two component, direct to metal polyurethane topcoat

formulated for spray applications in areas requiring VOC less than 3.5 lbs./US gallon. It offers a high

quality appearance with exceptional color and gloss retention.

Recommended use: For use on construction equipment, transportation equipment, truck frames, trailers, bulk tanks,

chemical trailer applications that require a topcoat as a monocoat application.

Features: Excellent gloss and color retention

Good Corrosion resistance

Resistant to chemical spills & splashes

Does not require a primer

Service temperatures: Maximum, dry service exposure only: 120°C/248°F

Availability: Not included in Group Assortment. Availability subject to confirmation.

PHYSICAL CONSTANTS:

Shade no./Color: 1L000 (formerly J-B 4400-006) White*

Finish: Full Gloss Volume solids, %: Full Sloss 57 ± 1

Theoretical spreading rate: 7.5 m²/litre - 76 microns

305 [sq. ft US gallon] - 3.0 mils DFT

Flash point: 86°F/30°C

Specific Gravity: 1.3 kg/litre - 10.9 lbs/US gallon

Dry to touch: 1 hour at 20°C/68°F

Dry to handle overnight

VOC content: 370 g/litre [<3.1 lbs/US gallon]

*wide range of colors available via Acrylithane™ HS Tint System

The physical constants stated are nominal data according to the Hempel Group's approved formulas.

APPLICATION DETAILS:

Version, mixed product 646JB

Mixing ratio: BASE 646J9 (formerly J-B 45010): CURING AGENT 941JB (formerly J-B 99955)

5:1 by volume

Application method: Airless spray Air spray Brush & Roll

Thinner (max.vol.): 08NJB DMC (JB 21142)-5% for VOC restrictions 5-15% 2-4oz. 08DJB (formerly JB 21099)

Pot life: 4 hours at 20°C/68°F

Nozzle orifice: 0.011"-.0.013" airless / 0.110" or 2.8 MM fluid cap conventional

Nozzle pressure: 138 bar [2,000 psi]

(Airless spray data are indicative and subject to adjustment)

Cleaning of tools: MEDIUM REDUCER 0832

Indicated film thickness, dry: 76 – 102 microns / 3.0 – 4.0 mils (see REMARKS overleaf)

Indicated film thickness, wet: 133 - 178 microns / 5.26 - 7.0 mils

Overcoat interval, min: overnight (20°C/68°F)
Overcoat interval, max: (See REMARKS overleaf)

Safety: Handle with care. Before and during use, observe all safety labels on packaging and

paint containers, consult Safety Data Sheets and follow all local or national safety regulations.

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SURFACE PREPARATION: The surface must be completely clean and dry at the time of application, and its temperature

above the dew point to avoid condensation. Minimum temperature for curing is 7°C/44°F. Abrasive blasting to minimum Sa 2½ (ISO 8501-1:2007) or SSPC-SP 10 w/ a surface profile corresponding to Keane-Tator Comparator, 3.0 G/S or ISO Comparator, Medium (G) **Repair and maintenance:** Remove oil and grease with suitable detergent. Remove salts and other contaminants by high pressure fresh water cleaning. Clean damaged areas thoroughly by power tool cleaning to SSPC-SP 11 (or St 3, ISO 8501-1) or by abrasive blasting to min. SSPC-SP 6 (or Sa 2, ISO 8501-1) preferably to SSPC-SP 10. Improved surface preparation will improve the performance of the paint. Feather edges to sound and intact areas. Dust off residues. Touch up to full film

thickness. .

APPLICATION CONDITIONS: Apply only on a dry and clean surface with a temperature above the dew point to avoid

condensation. Use only where application and curing can proceed at temperatures above: 7°C / 44°F. The temperature of the paint itself should be: 15-25°C/59-77°F. In confined spaces provide adequate ventilation during application and drying. Thinning may be necessary in the case of very long spray hoses and/or paint temperatures below 15°C/59°F. This will cause lower film build and longer drying time. Alternate reducers such as Acetone or Dimethyl Carbonate (DMC) may be used

to reduce product without adding VOC's.

REMARKS:

Mix thoroughly before use. Add 2 quarts of catalyst to a 1 each 1.25 gallon unit of ACRYLITHANE™

DTM (5:1 ratio) and mix thoroughly again. Only apply when air and surface temperature are

between 7°C-38°C/44°F-100°F.

Thinning: For VOC restrictive use, add Dimethyl Carbonate (DMC) or Acetone as needed for viscosity

adjustment. If VOC mixed total is not a concern, Add 08EJB (formerly J-B 21102 Fast Spray Reducer) as required. When temperature is over 70°F, use 08320 (formerly J-B 21092 Medium Reducer). Add 08BJB (formerly J-B 21093 Slow Reducer) to reduce dry spray and orange peel, if required. 085JB (formerly J-B 21078 Special Urethane Retarder) can be added to help add a wet

edge for spraying large parts.

Drying: Under normal conditions, and due to high film build applications, it dries to touch in 10 hours and

dries for overcoat overnight. Low temperature, high humidity, poor ventilation and thick films will retard drying. Addition of 99056 accelerator (*formerly J-B 99011*) at the rate of 1.0 fl. /oz. per mixed

gallon will shorten dry times.

Pot Life: Pot life is approximately 4 hours after mixing. Mix only the amount of material that can be used in 4

hours. Pot life is decreased with an increase in temperature. Mixed material should be kept in as

cool a location as possible.

Cleaning: Flush mixed material from pressure pot and lines immediately after use. Clean paint tools or spills

immediately with 08320 (21092 Medium Reducer), MEK, or lacquer thinner carefully observing

cautions on paint and thinner labels. Dried paint may need to be removed by scraping.

Overcoating: Sanding or roughening of surface is recommended if overcoating after 2 weeks.

Note: ACRYLITHANE™ DTM is for professional use only.

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This Product Data Sheet supersedes those previously issued

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