TriFLEX® HL

BPA free

TECHNICAL DATA SHEET

**This Technical Data Sheet supersedes those previously issued.*

DESCRIPTION

TriFLEX® HL (Hopper Lining) is a triple-resin, direct-to-metal interior lining system specifically engineered for hopper cars. It combines advanced resin technologies to deliver durable, long-lasting protection in demanding rail service. TriFLEX® HL is BPA-free and has been independently assessed as safe for use with food contact materials in the United States as an interior railcar coating for the repeated transport of food-contact polyethylene and polypropylene resin pellets.

TECHNICAL DATA

Color	Light Blue (RAL 5012)
Type	High Solids DTM
Solids Content	84% by volume
Finish	Gloss
VOC	As supplied 150 g/l (1.25 lb/gal) Thinned to max level 200 g/l (1.67 lb/gal)



SUBSTRATE & SURFACE PREPARATION

General	Clean to remove all contaminants in accordance with SSPC-SP 1. Substrate must be clean and dry.
Steel Substrate	Abrasive blast clean to a minimum NACE No. 3/SSPC-SP 6 with a minimum of 2-4 mil (50-100 microns) anchor profile that is sharp and angular for maximum adhesion.
Stainless Steel	All surfaces to be coated shall be abrasively blast cleaned to SSPC-SP 17 with a 2-4 mil (50-100 microns) blast profile.

MIXING & THINNING

Mixing	All coating kits are supplied at the proper mix ratio and should be mixed in their entirety. Mix Part A resin for approximately 2 – 3 minutes until color and consistency is uniform. Mix Part B catalyst until thoroughly homogeneous. Slowly add Part B catalyst to Part A and mix thoroughly for approximately 2 minutes.
Ratio	Five gallon kit Part A: 4.0 gallons (15.14 liters) | Part B: 1.0 gallons (3.79 liters) One gallon kit Part A: 0.80 gallons (3.03 liters) | Part B: 0.20 gallons (0.76 liters) *Product also supplied in 55 gallon drums and 250 gallon totes.
Thinning	MEK, MAK, or n–butyl acetate, up to 5% (by volume)
Pot Life	75 minutes at 77ºF (25ºC) 60 minutes at 86ºF (30ºC)

APPLICATION GUIDELINES

Equipment Type	Coating should be applied via airless spray equipment pump size 45:1 or greater or by PC equipment at a 4:1 (by volume) mix ratio - OR - Conventional spray (30:1), additional thinning may be required. *Contact APC Technical Service for additional information	
Dry Film Thickness	Average: 10-12 mils DFT (250-300 microns) Minimum: 8 mils DFT (200 microns) Maximum: 18 mils DFT (450 microns)	
Theoretical Coverage	At 1 mil: 1345 ft^2 / gallon (25 microns) At 10 mils: 135 ft^2 / gallon (250 microns) At 12 mils: 112 ft^2 / gallon (300 microns) *Allow for loss in mixing and application	At 1 mil: 33 m^2 / liter (25 microns) At 10 mils: 3.2 m^2 / liter (250 microns) At 12 mils: 2.7 m^2 / liter (300 microns) *Allow for loss in mixing and application
Dry to Touch	2 hours at 77ºF (25ºC)	
Full Cure	4 days at 77ºF (25ºC) or 1 hour at 130ºF (54ºC)	
Recoat Window	Minimum recoat window is 3 hours at 75ºF (24ºC). Contact APC Technical Services for recoat window parameters at other elevated temps. Overcoat Window: There is a 12 month window where TriFLEX® HL can be applied after cleaning the surface with MEK or acetone.	

APPLICATION CONDITIONS

Material	55ºF (13ºC) – 90ºF (32ºC)
Substrate	40ºF (5ºC) – 140ºF (49ºC)
Humidity	10% – 90%

CLEAN-UP & SAFETY

Clean-up	TriFLEX® HL can be cleaned up with MEK, MAK, n–butyl acetate, or acetone. Note: TriFLEX® HL can potentially gel up if not properly cleaned. This can be avoided by ensuring equipment is properly cleaned after each use and keeping Part B tightly sealed and the hopper empty or tightly sealed after each use.
Safety	Consult SDS

PACKAGING, HANDLING & STORAGE

Shelf Life	12 months
Storage	40ºF – 110ºF (4ºC – 43ºC) | 0 – 100% RH ***Keep Part B sealed tightly. If opened reseal completely.***

Information on TDS documents represent typical data for the mixed coating formulation (part A + part B) using 'as supplied' materials as of the date hereof. All information is correct to the best of our knowledge. Values should not be construed as specifications. Please contact Advanced Polymer Coatings' Technical Service Team if you have any questions related to this data sheet or application.

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