



HydroArmor[®] 7740

Low Density, Fire Retardant Protective Coating

Description

A sprayable, latex product designed for use on steel, aluminum, fiberglass, and plywood. This highly fire resistant material can be easily sprayed onto overhead and vertical surfaces to seal joints. Heavy wet film builds can be applied without runs, drips or sagging to bridge seams. Because this material is filled with hollow microspheres, this coating adds little weight to vehicle bodies, even at high film builds.

Our lab test of HydroArmor®7740 show that it is extremely durable under even the worst service conditions; several days at 96°C (205°F) and immersion in acidic and caustic solutions did not affect dried beads of this material. Beads did not lose adhesion or crack when test panels were bent at 34°C (-30°F). After weeks of exterior exposure cycling, the HydroArmor® coating remained intact and there was no adhesion loss. The highly flammability resistance and low smoke generation results obtained when tested under ASTM E162 and E662 permit this product to be used on passenger rail cars. HydroArmor®7740 dries quickly at ambient temperatures or can be force dried after only 30 minutes dry time at room temperature.

HydroArmor® 7740 is as safe to use and as easy to clean up as latex house paint. HydroArmor® 7740 provides better protection than any of the competitive products we've tested without environmental and safety problems inherent in many of the undercoatings available today.

Application

As with any adhesive or sealant, all loose dirt and dust should be removed from the surface to be coated before application. HydroArmor®7740 is designed to be applied with airless spray equipment. With this equipment, we can spray at 50 to 60 pounds air pressure using spray tips with orifices from .019" to .035". As with all air motor pumps, adequate air volume is required. HydroArmor® resists water washoff after air drying 30 minutes at 45 - 55% relative humidity; if not baked, it dries through in 24 hours or less (drying is slowed by high humidity and poor air circulation). Until HydroArmor[®]7740 dries, overspray can be removed and equipment can be cleaned with water. Dried material can be removed with Methyl Ethyl Ketone.

Properties	
Specific Gravity	0.71 - 0.77
Color	Black
Solids Content	45% - 48%
VOC Content	13-15 g/L
рН	9 - 10
Freeze/Thaw Stability: ASTM D 2243; 4 cycles to -29°C (-20°F)	Pass Sprayable after hand mixing
Shelf Life	6 months

Health & Safety

Prior to working with this or any product consult product label and Safety Data Sheet (SDS) for necessary health and safety precautions.

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THE FOLLOWING TESTS WERE PERFORMED ON PANELS COATED WITH 15 DRY MILS OF MATERIAL AFTER DRYING 21 DAYS @ 20°C (68°F); 50% RH

Effects of Heat Aging:	Flexibility maintained
ASTM C 792; 14 days @ 70°C (158°F)	No cracks
	No loss of adhesion
Effects of Exterior Exposure:	No cracks
GMTM 9505P: Cycle E	No loss of adhesion after two
	weeks of cycling
Surface Flammability:	
ASTM E 162	
Avg. Flamespread Index (Is)	22.18
Flamespread Index Range	19.2 to 24.4
Optical Density of Smoke Generation	Non-Flaming Flaming
ASTM E 662	
Ds @ 1.5 min. (average)	0.2 25.0
Ds @ 4.0 min. (average)	1.9 48.8
Dm(corr) (average)	15.4 116.9
Toxic Gas Generation	Gases Detected in PPM
BSS 7239	CO - 90, HCN - 1, SO2 - 5, HCL - 0,
	HF - 0, NO - 8, NO2 - 2

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