



PRODUCT DESCRIPTION

Type	Two-component acrylic polyurethane.
Description	Enviro-Tuff 458 HS Polyurethane is a high solids, low VOC 2K acrylic polyurethane finish formulated for exceptional weathering performance in many industrial applications. It is used where durability, color retention, corrosion resistance, and chemical and abrasion exposure are required.
Uses	<ul style="list-style-type: none"> • Architecturally exposed steel • Petrochemical • Oil & Gas Upstream • Mining equipment • OEM • Transpiration – truck and trailer applications • Heavy duty machinery
Features	<ul style="list-style-type: none"> • High solids, low VOC content • Superior Weatherability • Impact and abrasion resistant • Chemical Resistant

SUBSTRATE & SURFACE PREPARATION

All	Substrate must be clean, dry and free of contaminants. For all substrates prime with the specific and recommended primer.
Previously Painted Surfaces	Previously painted surfaces must be clean, dry and free of oil, grease, dirt, dust or other materials which would compromise adhesion of the product to the substrate. It is recommended to abrade the existing coating to roughen and degloss the coating. Existing coatings must attain a minimum 3A rating in accordance with ASTM D3359 Measuring Adhesion by Tape Test.
Galvanized Steel	Prime with specific Sumter Coatings primer as recommended by representative. Refer to specific primer's Product Data Sheet for substrate preparation requirements.

MIXING & THINNING

Ratio	2 – components. Combine base and activator components at a 4 to 1 ratio with curing agent 57X7040A Activator . Ensure both components are above 50°F before mixing and using.
Mixing	Mix the component thoroughly before use by boxing or with slow mechanical agitation to avoid adding air resulting in bubbles. To 4 parts base add 1 part activator 57X040A by volume. Stir to ensure complete mixing.
Thinning	Thinning is not normally needed. Add 560X1557 VOC Exempt Reducer as required to maintain VOC levels. 560X2005 Urethane Reducer can be used where VOC is not a concern for a medium reducer. Add 3-4 ounces of 480X9999 Roll-A-Glaze per mixed gallon to reduce dry spray and orange peel, if required. 480X9999 Roll-A-Glaze can be added to help add a wet edge for spraying large parts and to aid in brush and roll touch-up applications. If needed for improved drying 480X1935 Accelerator can be added at 1/2 oz. / gallon
Pot Life	4 hours sprayable @ 77°F.
Cleanup	Use Wash Solvent (560X0952).

APPLICATION GUIDANCE

Application Conditions	Application of these product systems requires recommended temperature / humidity conditions and film thickness ranges. The material, booth and or site, and substrate temperature should be no lower than 50°F before, during, and after application. Do not apply paint materials to surfaces less than 5°F above dew point, or to surfaces warmer than 105°F. Ambient temperature should be minimum 50°F to maximum 105°F. Paint temperature of 60°F to 80°F will provide best performance.
Spray	This product is high solids and can be applied by using multiple types of spray equipment including airless, air-assisted airless, and conventional and HVLP spray.
Note	<ol style="list-style-type: none"> 1. Conventional Spray pressure pot should have dual regulators, 3/8" (0.95 cm) ID minimum material hose, 0.07" (0.18 cm) ID fluid tip and corresponding air cap. 2. Airless Spray (suggested). <ol style="list-style-type: none"> a) 30:1 pressure pump b) 3.0 gallons / minutes c) Material hose 3/8" ID d) Tip size: 0.015-0.017" (0.038-0.043 cm) e) Pressure: 2100-2400 psi f) Filter: 60 mesh

Enviro-Tuff 458 series HS Polyurethane 458 series base / 57X7040A activator

CURE TIME & RECOAT WINDOW

Substrate Temperature	Set To Touch	Tack Free	To Recoat	Full Cure
75°F (24°C)	30'	1 hour	When able to handle. Abrade after 2 weeks.	7 days

Drying times are dependent upon film thickness, temperature and humidity.

PACKAGING, ESTIMATING & HANDLING

Product	Code	Packaging
Enviro-Tuff 458 HS Polyurethane	458 series	1-gallon pails, 5-gallon pails, drums. Fill level dependent on color.
Enviro-Tuff Polyurethane Activator	57X7040A	1 QT, 1gal. F-style containers, 5-gal. pails.
Theoretical Coverage	422 ft ² / catalyzed gallon @ 2.0 mils dry film thickness, unreduced.	
Storage & Shelf Life	Maintain products in original packaging and sealed until ready for use. Estimated shelf life is 2 years when stored in a dry area at 70°F (21°C). Actual shelf life may vary with storage conditions.	
Safety	Mixes and applications of this product present several hazards. Read and follow the hazard information, precautions and first aid directions on the individual product labels and safety data sheets before using.	
Ventilation	Provide thorough air circulation during and after application until the material has cured when used in enclosed areas.	

TYPICAL PHYSICAL PROPERTIES

Property	Typical Value
<i>Specific properties below are of:</i>	Enviro-Tuff 458 HS Polyurethane 458T1000B White Tint base.
Colors	Multiple colors possible
Gloss	Gloss, 90+ units, custom glosses available
Pot Life	4 hours. <i>Best results are achieved when using within 4 hours of mixing. Do not use catalyzed material that has exceeded its pot life.</i>
Volume Solids	53.0%
Viscosity	29-33" Zahn 3 cup for base
Recommended Wet Film Thickness	4.0 – 5.0 mils
Recommended Dry Film Thickness	2.1 to 2.7 mils
Flash Point	Base is 39°F
VOC	3.36 lbs. / gal. (402.6 g/L) mixed
Weight / gallon	10.94 lb./gal. base component
Temperature Resistance	275°F
Shelf Life	2 years unopened and unactivated

TINTING GUIDELINES

Enviro-Tuff 458 Series 2K Polyurethane can be tinted and has been tested with 844 and 869 tint pastes. The following guideline suggests maximum tint levels of paste.

458T1000 White is short filled and will accept 4 oz. of tint paste.

458T3000 Midtone is short filled and will accept 8 oz. of tint paste.

458T5000 Neutral is short filled and will accept 12 oz. of tint paste.

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