

## FAST-SET AROMATIC URETHANE ELASTOMER

### DESCRIPTION AND USE

ULTRA-TUFF 2500 is a 100% solids, fast-set, two-component, elastomeric aromatic, urethane protective coating.

ULTRA-TUFF 2500 is recommended as a durable, high performance membrane covering for polyurethane foam and other roofing and construction surfaces.

### ADVANTAGES

ULTRA-TUFF 2500 exhibits excellent flexibility and impact resistance.

ULTRA-TUFF 2500 contains no volatile solvents.

ULTRA-TUFF 2500 is listed and classified by Underwriters Laboratories, Inc. UL790 Class A as an integral component of numerous roof deck and construction assemblies, File #14330.

ULTRA-TUFF 2500 IS APPROVED BY THE CALIFORNIA STATE FIRE MARSHALL

### PRIMER

Sprayed urethane foams: no primer necessary. Consult manufacturer for application to other construction surfaces.

### SERVICE TEMPERATURES

-40°F to 225°F

### ADHESION

ULTRA-TUFF 2500 adheres well to most surfaces, including spray-applied polyurethane or isocyanurate foam insulations and other construction surfaces. ULTRA-TUFF 2500 should not be exposed to ultra-violet for more than 24 hours for best topcoat adhesion.

### WEATHERING & ULTRA-VIOLET RESISTANCE

After 6,000 hours QUV accelerated weathering, according to ASTM G53, Atlas carbon arc, ASTM D822, and Atlas Xenon, ASTM G26, ULTRA-TUFF 2500 had excellent appearance with no cracking, checking, delamination or loss of flexibility and only slight chalking.

## Nominal Properties

PHYSICAL PROPERTY	VALUE	TEST METHOD
Solids by Volume	100%	ASTM D-2697
Solids by Weight	100%	ASTM D-2369
Hardness Shore A	90	ASTM D-2240
Tensile Strength	1800 PSI +/- 100	ASTM D-412
Elongation	400% +/- 100	ASTM D-412
Permanent Set @ Break	9%	ASTM D-412
Tear Resistance	300 PLI	ASTM D-624
Water Absorption	<1.5%	ASTM D-471
Permeability, US Perms @ 40 dry mils	.02	ASTM E-96(B)
Flash Point	> 300°F	ASTM D-56
Low Temperature Flexibility	Pass	ASTM D-2136
High Temperature Resistance	225°F	180° Bend @ -40°F ASTM D-573 Continuous

The information contained herein is for purposes of identifying the product and does not constitute a warranty that the product will conform to that description. Product specifications and performance will vary depending on application methodologies, raw materials and other factors.

## APPLICATION

ULTRA-TUFF 2500 coating is very rapid setting, and, as such, must be sprayed through heated, airless proportioning equipment. The "B" component should be thoroughly power mixed prior to application. Consult **General Coatings Manufacturing Corp.** Technical Service Personnel for further equipment recommendations. Important Note: ULTRA-TUFF 2500 is designed as a "base coating" only. For applications requiring maximum ultraviolet resistance, ULTRA-TUFF 2500 must be topcoated.

## Recommended Thickness

Consult manufacturer for specific application guidelines.

## Consistency

Both the "A" and "B" components of ULTRA-TUFF 2500 are low-viscosity, translucent liquids containing various colored dyes for ease of recognition.

## Coverage

ULTRA-TUFF 2500 theoretical mil sq. ft. per gallon is 1600.

## Thinner

None required.

## MAINTENANCE

ULTRA-TUFF 2500 is virtually maintenance free. If ULTRA-TUFF 2500 is damaged, the damaged area should be removed. If substrate is affected, the surface should be repaired. The ULTRA-TUFF 2500 to be repaired should be free of all oil, tar, paint and other contaminants.

## TECHNICAL SERVICE

Complete technical information and assistance for a specific application and/or application procedure is available from **General Coatings Manufacturing Corp.**

## STORAGE STABILITY

Six months at 50°F to 100°F. Both components will solidify (freeze) if stored below 30°F.

## PROTECTION OF THE WORKPLACE

The overspray from coating can carry considerable distance and care should be taken to do the following:

1. Post warning signs a minimum of 100 ft. from the work area.
2. Cover all intake vents near the work area.
3. Minimize or exclude all personnel not directly involved with the spray application.
4. No welding, smoking or open flames.
5. Have CO<sub>2</sub> or other dry chemical fire extinguisher available at the jobsite.
6. Provide adequate ventilation.

## Safety, Health & Toxicity Data

A Material Safety Data Sheet (MSDS) has been prepared on this coating. All personnel who will come in contact with the product should read and understand the MSDS.

## Protective Equipment

Since the coating is atomized into a very fine particle distribution during spray application, it is essential that maximum effort is made to protect the spray mechanic and others near the workplace from undue exposure. This coating contains polymeric isocyanate (MDI) and, as such, can be very sensitizing, particularly from the standpoint of vapor inhalation. Some other ingredients in the coating may be sensitizing from the standpoint of skin contact or eye contact.

## Vapor Inhalation

The best form of protection against polymeric isocyanate (MDI) or other potentially sensitizing vapors in the workplace is a fresh air supply. Numerous manufacturers, including the 3M Company and MSA, make full-face fresh air masks. For maximum protection, we recommend use of NIOSH/MSHA approved self-contained breathing apparatus with a full-face piece operated in a positive pressure mode. In well-ventilated application conditions, the use of Type C organic vapor cartridge respirators may be acceptable.

## Skin Contact

To prevent excessive skin contact with the sprayed product, we recommend use of fabric coveralls and neoprene or other resistant gloves.

Skin contact with liquid components can result in a rash or other irritation. Wash any affected skin area with water. Wipe residual liquid from the skin with a clean cloth, then wipe the affected area with a 30% solution of rubbing alcohol. Follow the alcohol wipe with repeated washings with soap and water. If a rash or other irritation develops, see a physician.

## Eye Contact

Wear a full-face mask or OSHA-approved protective goggles.

Eye contact with liquid or sprayed components can result in corneal burns or abrasions. Upon exposure, eyes should be flushed with water for an extensive period. Summon "emergency trained" medical attention immediately.

### First Aid Considerations

Vapor inhalation problems are characterized by coughing, shortening of breath and tightness in the chest. Anyone exhibiting these types of symptoms should be immediately removed from the workplace and administered oxygen or fresh air. If the condition is prolonged or extreme, summon "emergency trained" medical attention immediately.

Effects of overexposure to vapor are characterized by nasal and respiratory irritation, dizziness, nausea, headache, fatigue, possible unconsciousness or even asphyxiation.

If ingested and victim is conscious, give large amounts of water or milk to drink. Obtain medical attention immediately.

### Flammability

Non-flammable.

### Toxicity

Part A contains polymeric isocyanate (MDI) which can be toxic if inhaled as particulate matter. Consequently, a full-face fresh air respirator is required for spray applications.

The information herein is believed to be reliable, but unknown risks may be present. General Coatings Manufacturing Corp. warrants only that the material shall be of merchantable quality; this warranty is in lieu of all other written or unwritten, expressed or implied warranties; and General Coatings Manufacturing Corp. expressly disclaims any warranty for a particular purpose or freedom from patent infringement. Accordingly, Buyer assumes all risks whatsoever as to the use of these materials and Buyer's exclusive remedy as to any breach of warranty or negligence claim shall be limited to the purchase price of the materials. Failure to strictly adhere to recommended procedures shall relieve General Coatings, Inc. of all liability with respect to the materials or the use thereof.

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