

## HAVAFLEX T.A.-117 A TROWELABLE ABLATIVE MATERIAL

### Product Description

**Havaflex T.A.-117** is a two-component modified phenolic ablative coating and adhesive. This material was originally developed for use by the U.S. Navy to provide a flexible trowelable coating material to protect decks, bulkheads, and shipboard launchings systems from the extremely high temperatures (up to 5000°F.) and high gas velocities (up to MACH 3.0) present during missile launch operations.

### Technical Data

#### Properties

**Havaflex T.A.-117** is flexible, an excellent thermal insulator, will not support combustion, and is resistant to many chemical environments, including acid and salt solutions. The material has a pot life of 30 to 40 minutes at room temperature and cures within 24 to 36 hours. The shelf life is approximately one year when stored at 40°F or below. Havaflex TA-117 will adhere to almost all types of surfaces (free of moisture, dirt, or grease) without the need of a primer. **Havaflex T.A.-117** can be machined, sawed, planed, drilled, ground or sanded, spun molded and can be applied vertically in ¼ inch layers to desired thickness without sagging.

#### Physical Properties

Tensile Strength (psi).....	625	Tensile Lap Shear (psi).....	625 (ASTM D 638) (ASTM D 1002)	
Tensile Elongation, %.....	12.8	Water Absorption, % (ASTM D 638) (96 hrs. at 65-75°F).....	0.67	
Density (lbs/ft <sup>3</sup> ).....	81.2	Flame Spread Index.....	143 (ASTM E 162)	
Specific Gravity..	1.30	Coverage (1/4" thick).....	6.2ft <sup>2</sup> per kit	
Thermal Conductivity.....	3.56 (Btu/ft.z/°F./hr/in of path)	Coefficient of Thermal Expansion (in/in/°Cx10 <sup>-4</sup> ) perpendicular	2.90 (in/in/°Cx10 <sup>-5</sup> ) parallel	7.00
Shore Hardness.....	90 Type A			
Specific Heat.....	0.206 (ASTM E 1269-94) (Btu/lb/°F)			

#### Packaging

**Havaflex T.A.-117** is available in one-gallon kits, and is packaged in plastic containers with Part A and Part B in separate containers. The two components can be easily mixed together by using a ½ inch electric drill with a stainless steel Jiffy mixing blade.

#### Product Bulletin Havaflex T.A.-117 A Trowelable Ablative Material Rev. 6/21/06

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