

T E C H N I C A L D A T A S H E E T



ENERFAB™
LININGS GROUP

ENERFAB™ LASTIGLAS™/MUNKADUR PL511 CHEMICAL RESISTANT COATING

PRODUCT DESCRIPTION

ENERFAB **LASTIGLAS/Munkadur PL511** is a 100% solids, two-component epoxy hot spray coating resin. Its outstanding broad spectrum chemical resistant provides protection in aggressive environments. **LASTIGLAS/Munkadur PL511** may be used directly over approved substrates or as a topcoat over slurry, mortar or standard membrane systems.

FEATURES/BENEFITS

- Meets FDA 175.300 approval
- Provides outstanding chemical resistance to a broad range of acids, alkalies, and solvents
- Is 100% solids, zero VOC
- May be heat cured at 130°F
- Provides 304 Stainless Steel performance when applied to properly prepared carbon steel
- Tg 120°F

TYPICAL USES

LASTIGLAS/Munkadur PL511 is used in areas where maintenance of a high performance chemical resistant epoxy system is required.

LASTIGLAS/Munkadur PL511 has no offensive solvent odor during installation. It is used to protect concrete and steel surfaces in internal tank lining and process vessel lining applications where excellent long term chemical resistance and FDA 175.300 approval is required. Typical uses may include food and beverage, chemical processing, pharmaceutical, pulp & paper, and water & wastewater facilities.

PACKAGING

Product #	Package	Part A	Part B
PL261	50 gal drum	1 x 50 gal	1 x 50 gal

NOTE: Repair kits available in two 2 oz tubes.

TYPICAL PHYSICAL PROPERTIES

Mix Ratio A:B	1:1	Resistance to Elevated Temperatures	No slip or flow at required temperature of 120°F
Color	Steel Gray	Adhesion	
Solids, by volume	100%	ASTM D 4541	Concrete 325 psi 100% concrete failure
VOC (Volatile Organic Content)	-0-	ASTM D 1002	Steel 1000 psi Minimum 2-3 mil profile
Viscosity, mixed @ 130°F	16.5 cps	Abrasion Resistance	0.03 grams lost ASTM D 4060 CS-17 wheel
Coverage @ 20 mils (20% loss)	160 sq. ft.	Flammability	Self-extinguishing ASTM D 635 over concrete
Pot Life, 100 grams mass @ 130°F	9.7 minutes	Sag Resistance, single pass	25-30 mils
ASTM D 2471 @ 140°F	3.5 minutes	Impact Resistant	
Cure Time @ 73°F, 50% RH		Direct, inch pound	100 in. / lb.
	Dry to Touch	Reverse, inch pound	80 in. / lb.
	Full Cure	ASTM D 2794	
	@ 140°F		
Hardness, Shore D	85		
ASTM D 2240			

ENERFAB, INC.
4955 Spring Grove Ave.
Cincinnati, OH 45232
513-641-0500
www.enerfab.com



ENERFAB™

LIMITATIONS

- Substrate must be structurally sound and free of bond inhibiting contaminants.
- During installation and initial cure cycle substrate and ambient air temperature must be at a minimum of 45°F. Substrate temperature must be least 5°F above the dew point (for lower temperature installation contact the Technical Service Department).
- When required, adequate ventilation shall be provided and proper clothing and respirators worn.
- All foodstuffs must be removed from the work area and areas subject to fumes during the installation and initial cure.
- Extinguish all sources of ignition during the entire installation cycle.
- Strictly adhere to published coverage rates.
- Two-component heated spray equipment must be used.

SURFACE PREPARATION

Proper inspection and preparation of the substrate to receive **LASTIGLAS/Munkadur PL511** is critical. NACE No. 2 / SSPC-SP-10 Near White Metal Blast is required for steel.

APPLICATION

• MATERIAL DELIVERY AND STORAGE

Store **LASTIGLAS/Munkadur PL511** in a temperature controlled environment, 50° F (10° C) to 80° F (26° C), and out of direct sunlight. Keep resins, hardeners, and solvents separated from each other and away from sources of ignition. Shelf life is one year in original, unopened containers stored at temperatures lower than 80° F (26° C).

• INSTALLATION

We understand that you want the system installed right the first time. ENERFAB only utilizes its own highly trained personnel to perform all work including surface preparation, application of ENERFAB's proprietary product, and quality inspection.

• EQUIPMENT

Plural component with heated lines and tank.

CHEMICAL RESISTANCE

For chemical resistance information, consult Enerfab Chemical Resistance Guide and/or consult Enerfab's Lining Service Department.

MAINTENANCE

For maintenance information, consult Enerfab Lining Service Department.

WARRANTY

The sale of ENERFAB products is governed by the Standard Terms and Conditions of Sale. ENERFAB makes the following **LIMITED WARRANTY** that its products have been supplied free from manufacturing defects, and will conform to ENERFAB manufacturing standards. Technical data furnished is true and accurate to the best of our knowledge; however, no guarantee of accuracy is given or implied. This Limited Warranty shall not apply in the case of damage beyond the scope and protection of the products, exposure of the products to solvents and/or higher concentrations of acids than that for which the products are designed and loss of bond due to hydrostatic pressure, vapor pressure, capillary action or moisture from within, under or adjacent to the concrete surface.

ENERFAB's LIABILITY SHALL NOT EXCEED REPLACEMENT OF OR RETURN OF THE PURCHASE PRICE FOR THE PRODUCTS WHICH IT MAY SELL WHICH MAY PROVE TO BE DEFECTIVE UNDER NORMAL USE AND SERVICE WITHIN ONE YEAR FROM DATE OF SALE AND WHICH UPON EXAMINATION BY ENERFAB SHALL DISCLOSE, TO ENERFAB's SATISFACTION, TO BE DEFECTIVE. IN NO EVENT SHALL ENERFAB BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, BUYERS LOSS OF MATERIAL OR PROFITS, INCREASED EXPENSE OF OPERATION, BODILY INJURY, LOSS OF USE OF PROPERTY, OR DOWNTIME. ENERFAB MAKES NO IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. THE BUYER HEREBY EXPRESSLY WAIVES ANY CLAIM TO ADDITIONAL DAMAGES.

This Limited Warranty supersedes any other warranty or other representation, whether written or oral, hereto made between parties.



ENERFAB™

ENERFAB, INC. • 4955 Spring Grove Ave. • Cincinnati, OH 45232 • 513-641-0500 • www.enerfab.com