SELECTION & SPECIFICATION DATA

Generic Type	100% Solids Aromatic Pure Polyurea
Description	Reactamine ET is an extra tough, abrasion resistant elastomer coating with extremely fast cure times that is ideal for concrete substrates. It possesses exceptional toughness for numerous industrial applications that include linings for wastewater applications, secondary containment, sewer lines, manhole restoration, rail cars, wastewater lagoon linings, and other applications needing a tough resilient coating. It is extremely resistant to high abrasion and impact with elongation properties to tolerate movement over concrete substrates.
Features	• Tough abrasion and impact resistant film • High tensile strength and tear resistance • Excellent water and waste water resistance • Moisture tolerance; during and after cure • Low odor; zero VOC • Can be applied from 20 °F to 150 °F (-6 °C to 65 °C) • Extremely fast cure times (dries to the touch in 10 seconds) • Service temperature (dry) of -40 °F to 250 °F (-4 °C to 121 °C) • Single coat application (=250 mils) • Applies using a heated, plural component spray system • Complies with FDA 21CFR 175.300 criteria for dry food contact
Color	Standard colors: 0700 (Grey) Limited other colors available upon request. Contact your Carboline representative for availability.
Finish	Gloss
Primer	Normally not required. Use Carboguard 1340 WB for dry or damp concrete.
Dry Film Thickness	30 - 250 mils (762 - 6350 microns) per coat
Solids Content	By Volume 100%
Theoretical Coverage Rate	1604 ft²/gal at 1.0 mils (39.4 m²/l at 25 microns) 53 ft²/gal at 30.0 mils (1.3 m²/l at 750 microns) 6 ft²/gal at 250.0 mils (0.2 m²/l at 6250 microns) Allow for loss in mixing and application.
VOC Values	**As Supplied** : 0 lbs/gal (0 g/l) Calculated
Limitations	This product is an aromatic polyurea and is not UV-stable for color or gloss retention. Discolorations can and will occur upon exposure to UV (exterior applications). Discoloration or down-glossing does not affect performance.

SUBSTRATES & SURFACE PREPARATION

General	The following recommendations are provided as a guideline for optimum performance of Reactamine ET.

SUBSTRATES & SURFACE PREPARATION

Steel
- Remove dirt/dust/grease/oil following SSPC-SP1
- Abrasive blast to SSPC-SP10
- Achieve a minimum 3.5 mil “angular” anchor profile
- Ensure dust/smut from blasting operation does not interfere with adhesion
- Apply Reactamine ET prior to any flash rusting or contamination fall-out.

Concrete or CMU
Concrete shall be designed, placed, cured, and prepared per NACE No. 6/SSPC-SP 13, latest edition. Abrade to remove all laitance, loose concrete, etc. and to create surface profile in accordance with the appropriate ICRI CSP standard for the coating system.

PERFORMANCE DATA

All test data was generated under laboratory conditions. Field testing results may vary.

Test Method	System	Results
100% Modulus	ASTM D412	2400 psi
Elongation	ASTM D412	912%
Flashpoint	Pensky-Martin	>200 °F
Flexibility	ASTM 1737	Pass 1/8” Mandrel
Hardness	ASTM D2240	Shore D 45
Taber AbrasionCS17 Wheel; 1000 gm weight; 1000 cycles	ASTM D4060	25 mg loss
Tear Strength	ASTM D624	550 pli
Tensile Strength	ASTM D412	2420 psi

MIXING & THINNING

Mixing
- It is not necessary to pre-mix Part A. Power mix Part B until the pigments are dispersed into a homogenous liquid. **DO NOT BATCH MIX A & B.**
- **DO NOT THIN Reactamine ET**

Ratio
1:1

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

General
Applicators must be knowledgeable with the proper safety guidelines, operation, and maintenance of the spray equipment (pumps, hoses, heaters, and spray gun).

Spray Equipment
Use only heated plural component airless equipment.
- Plural airless pump must have 1:1 ratio capability along with 1.25 gallons per minute with a fluid pressure up to 3000 psi.
- Paint system setup that can transfer coatings from heated drums to the proportioners and maintain heated material to the spray tips. Contact Carboline Technical Service for specifics.
- The fast reaction time of this coating requires the use of a “fusion” gun where components A and B collide in a mixing chamber near the gun tip orifice.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	155°F (68°C)	20°F (-7°C)	20°F (-7°C)	0%
Maximum	170°F (77°C)	150°F (66°C)	100°F (38°C)	85%

Industry standards are for substrate temperatures to be 5°F (3°C) above the dew point.
Maximum recoat window is 4 hours. If maximum recoat time is exceeded, the surface must be abraded prior to the application of additional coats.

CURING SCHEDULE

Surface Temp.	Gel Time	Tack Free	Foot Traffic	Heavy Traffic/ Chemical Spillage
75°F (24°C)	10 Seconds	16 Seconds	5 Minutes	60 Minutes

CLEANUP & SAFETY

Cleanup	Use clean water for clean-up. Use Thinner 2 for more difficult to clean tools. In case of spillage, absorb and dispose in accordance with local applicable regulations.
Safety	Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions. Use adequate ventilation. Keep container closed when not in use.
Caution	This product does not contain flammable solvents; however, clean-up solvents that may be used do contain flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Packaging	10 Gallon Kit (2 x 5 gallon pails) 106 Gallon Kit (2 x 55 gallon drums)
Shelf Life	Part A or B: 12 months *Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
Storage Temperature & Humidity	60 to 90 °F (16-32 °C)
Storage	Store indoors and keep dry. Blanket all partial drums with nitrogen gas to prevent moisture contamination. Avoid freezing. Do not open until ready to use
Shipping Weight (Approximate)	9.3 lb/gal. (4.2 kg/gal.)
Flash Point (Setaflash)	Part A: 400 °F (204 °C) Part B: >200 °F (93 °C)

WARRANTY

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