Carboguard® 6250 N

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Solventless Epoxy
Description	Single-coat, ultra-high build coating designed for use on nuclear torus lining applications (a torus is a doughnut-shaped storage area for cooling water). Carboguard 6250 N is designed to handle exposures inside nuclear containment facilities (Level 1) for both radiation tolerance and film integrity during a loss of coolant accident (LOCA).
Features	• Single coat application reduces labor costs • Ultra-high build capabilities provides a void-free film and excellent edge protection • Application by airless spray or plural component equipment • VOC compliant to current AIM regulations
Color	Grey (0700, U74P), White (U80P) All colors are unmatched. Color variance should be expected between batches.
Finish	Eggshell
Primer	Self-priming; Carboguard 2012 N as needed.
Dry Film Thickness	Consult Carboline Tech Service
Solids Content	By Volume 99% +/- 1%
Theoretical Coverage Rate	1588 ft²/gal at 1.0 mils (39.0 m²/l at 25 microns) Allow for loss in mixing and application.
VOC Values	**As Supplied** : 12 g/l (0.1 lbs/gal) These are nominal values and may vary slightly with color.
Dry Temp. Resistance	Continuous: 140°F (60°C) Non-Continuous: 180°F (82°C) Discoloration and loss of gloss is observed above 140°F (60°C).
Limitations	Epoxies may lose gloss, discolor and chalk when exposed to sunlight. This coating commonly develops an amine-blush during cure. While this condition will not adversely affect performance of the coating, this blush must be removed before applying additional coats and may require removal before placing into service.

SUBSTRATES & SURFACE PREPARATION

General	Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.
Steel	SSPC-SP10 Surface Profile: 2-4 mils (50-100 microns) minimum or in accordance with project owner's specifications.

MIXING & THINNING

Mixing	Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS

MIXING & THINNING

Thinning	Do not thin.
Ratio	4:1 ratio (Part A to Part B)
Pot Life	Approximately 45 minutes at 75°F (24°C). Pot life ends when material begins to thicken and starts to heat up. Pot life times will be less at higher temperatures.

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.

Spray Application (General)	Recommended for application by single or plural component airless spray. This is a high solids coating and may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. The following spray equipment has been found suitable and is available from manufacturers.
Conventional Spray	Not recommended.
Airless Spray	Pump Ratio: 45:1 (min.)* GPM Output: 3.0 (min.) Material Hose: ½" I.D. (min.) Tip Size: 0.035-0.042" Output PSI: 2700-3000 Filter Size: 60 mesh *PTFE packings are recommended and available from the pump manufacturer. Contact Carboline Technical Service for plural component equipment recommendations.
Plural Spray	Use a fixed ratio (4:1 by volume) plural component spray rig such as: Graco King Hydro-Cat (or equal) with heated hoppers, heated hoses to a mixer manifold through a static mixer to a 50 ft. whip hose followed by a silver gun (Binks 1M or equal) utilizing self-cleaning reverse "a" tips from 0.019 to 0.035 inches. Use of an air assisted spray gun is acceptable. The "A" side should be within 90-120°F (32-49°C) and the "B" side within 90-100°F (32-38°C). This will ensure proper spraying of the product. Take care to prevent the mixed material from setting up in your hoses. For best results, keep hoses as short as possible, and purge them immediately if work is interrupted.
Brush & Roller (General)	Not recommended except when stripe coating or touch up.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	90°F (32°C)	125°F (52°C)	110°F (43°C)	90%
Optimum	75°F (24°C)	75°F (24°C)	75°F (24°C)	50%

This product simply requires the substrate temperature to be above the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions. Best results are obtained when ambient and surface temperatures are decreasing or constant.

CURING SCHEDULE

Surface Temp.	Minimum Recoat Time	Maximum Recoat Time
50°F (10°C)	30 Hours	7 Days
60°F (16°C)	24 Hours	4 Days
75°F (24°C)	12 Hours	2 Days
90°F (32°C)	4 Hours	1 Day

These times are based on 18 mils (450 microns) or higher dry film thickness at 50% RH. Condensation on the surface or humidity above 25% during application and curing will result in a surface haze or blush. Any haze or blush must be removed by water washing before recoating. During high humidity conditions, it is recommended that the application be done while temperatures are increasing. If the maximum recoat time is exceeded, the surface must be washed with detergent and water, then abraded by adequate methods to produce a subsequent anchor profile for an additional coat.

For Immersion service please contact Carboline Technical Service Department for specific curing requirements.

CLEANUP & SAFETY

Cleanup	Use Thinner #2 or Acetone. In case of spillage, absorb and dispose of 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 workman-like safety precautions.
Ventilation	While this is a solventless epoxy, it is common practice when used as a tank lining or in enclosed areas to circulate the air during and after application until the coating is cured. Minimal protection is needed when proper ventilation is achieved. The ventilation system should be capable of preventing any solvent vapor concentration from reaching the lower explosion limit for any solvents that may be present. User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor levels, use MSHA/NIOSH approved supplied air respirator.
Caution	This product may contain flammable solvents if thinned. 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

Shelf Life	Part A: 6 months to 24 months Part B: 24 months The film build (per coat) will decrease with age of the part A as follows but the cure mechanism and performance is not affected 3 months or less: Over 60 mils (1524 microns) is typical 3-6 months: 30-50 mils (762-1270 microns) is typical 6 months or older: Can be less than 30 mils (762 microns) Follow intercoat preparation requirements when applying multiple coats
Storage Temperature & Humidity	40-110°F (4-43°C) For 24-48 hours prior to use narrow the storage temperature to 70-85°F (21-29°C) to facilitate ease of mixing
Storage	Store indoors.

PACKAGING, HANDLING & STORAGE

Shipping Weight (Approximate)	1 Gallon Kit: 12 lbs. (5 kg) 5 Gallon Kit: 55 lbs. (25 kg)
Flash Point (Setaflash)	Part A: >205°F (96°C) Part B: >205°F (96°C)

WARRANTY

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