

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type Self-priming anti-corrosive aliphatic acrylic polyurethane

Description

Carbothane 137 HS is a fast-drying, high build, two component polyurethane coating which exhibits excellent dry times and handling characteristics required by Original Equipment Manufacturers. Has excellent UV resistance and good corrosion resistance in direct to metal applications for C1 to C3 environments, over primers for C4 to C5 environments.

Color

Available in wide range of colours on request. Certain colours may require multiple coats for adequate hiding. Contact your Carboline Representative for availability.

Semi-Gloss Finish

Typical Uses

Recommended as a direct to metal finish coat or as a finish coat over properly primed substrates. Typical applications include air compressors, propane tanks, trailer chassis and frames, valves, pumps, waste water treatment plant equipment, agricultural equipment and general industrial equipment.

Recommended **Thickness** 40-75 microns per coat

Solid(s) Content

By Volume:

Carbothane 137 HS (Colours): 65% ± 2% Carbothane 137 HS (Aluminium): 62% ± 2%

Theoretical Coverage

8.67m²/lt at 75 microns 13m²/lt at 50 microns

*NOTE: Material and application losses will vary and must be taken into consideration when estimating job requirements.

VOC Values

Rates

As Supplied: 277

These are nominal values and may vary slightly with color.

Dry Temp. Resistance

Continuous: 93°C (199°F) Non-Continuous: 121°C (250°F)

Discoloration and loss of gloss is observed above 200°F (93°C).

Limitations

*The alignment of aluminum flakes in aluminum-filled finishes is very dependent on application conditions and techniques. Care must be taken to keep conditions as constant as possible to reduce variations in final appearance. It is also advisable to work from a single batch of material since variations can occur from batch to batch. For more information consult StonCor ME Technical Service Department.

NOT RECOMMENDED FOR: Continuous immersion service.

Substrates &

SUBSTRATES: Can be used over properly prepared steelwork. Compatable Coatings | COMPATIBLE COATINGS: Can be used over urethane, epoxy and others as recommended.

SUBSTRATES & SURFACE PREPARATION

General Remove any oil, grease, dust, chalking and dirt from surface to be coated.

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SUBSTRATES & SURFACE PREPARATION

Steel

Abrasive blast to a near white metal finish in accordance with ISO 8501 SA21/2 to obtain a 25 to 50 micron blast profile.

MIXING & THINNING

Mix separately, then combine and mix in the following proportions – do not mix partial kits: 19-Liter Kit:

Mixing

Carbothane 137 HS Part A: 16.625 Liter Carbothane 137 HS Part B: 2.375 Liter

Thin up to 20% by volume with Carboline Thinner# 25 for normal spray or brush application.

Thinning

NOTE: Substitute thinners may contain alcohols which will inhibit the cure of Carbothane 137 HS. Use of thinners other than those supplied or approved by StonCor ME may adversely affect product performance and void product warranty, whether express or implied.

Ratio 7:1 (Part A to Part B) by Volume

3 Hours at 25°C and less at higher temperatures.

Pot life ends when the material becomes too viscous to use.

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.

Use sufficient air volume for correct operation of equipment.

Use a 50% overlap with each pass of the gun. On irregular surfaces, coat the edges first, making an extra pass later.

Spray Application

NOTE: The following equipment has been found suitable, however, equivalent equipment may be substituted.

Conventional Spray

Use a 10mm minimum I.D. material hose, 0.043" I.D. fluid tip and appropriate air cap. Hold approximately 300 to 350mm from surface and at a right angle to the surface.

Pump Ratio: 30:1 (min)* Material Hose: 10mm I.D. (min) Tip Size: 0.013 to 0.015"

Airless Spray

Output psi: 2100 to 2300 (145-159 Bar)

60-100 mesh Filter Size:

*Teflon packings are recommended and are available from the pump manufacturer.

Brush & Roller (General) Brushing recommended only for touch-up of small areas. Use natural bristle brush applying with full strokes.

For roller application, use a short nap mohair roller with phenolic core. Avoid rebrushing and/or rerolling.



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APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	18°C (64°F)	2°C (36°F)	2°C (36°F)	0%
Maximum	43°C (109°F)	54°C (129°F)	49°C (120°F)	85%

Do not apply when the surface temperature is less than 2°C above the dew point.

Special thinning and application techniques may be required above or below normal conditions.

DRYING SCHEDULE

Surface Temp.	Dry to Handle	Final Cure
16°C (61°F)	6 Hours	10 Days
24°C (75°F)	3 Hours	7 Days
32°C (90°F)	1.5 Hours	5 Days

These times are based on recommended dry film thickness of 75 microns

Higher film thicknesses will lengthen cure times. Maximum recoat time is 1 year at 24°C.

RAIN RESISTANCE: Requires a minimum cure of three hours at 25°C and longer at lower temperatures. Surface moisture before this time will decrease the gloss.

CLEANUP & SAFETY

Cleanup | Use Carboline Thinner # 2

Caution Read and follow all caution statements on this product data sheet and on the material safety data sheet for this product.

PACKAGING, HANDLING & STORAGE

Part A: 36 Months minimum when stored at 25°C

Part B: 24 Months minimum when stored at 25°C

NOTE: Polyurethane materials are moisture sensitive. Keep tightly covered before use. Moisture contamination will cause poor cure of the coating or gelation of Part B.

Shelf Life

*Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original

*Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.

Shipping Weight (Approximate)

19-Liter Kit: 27.5Kg

Storage Temperature &

Temperature: 4 to 43°C

Humidity

Humidity: 0 to 90%

Flash Point (Setaflash)

Carbothane 137 HS Part A: 40°C Carbothane 137 HS Part B: 50°C

Carboline Thinner #25: 27°C

Storage | Store indoors

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TYPICAL CHEMICAL RESISTANCE

Exposure	Fumes	Splashes & Spills
Acids	Excellent	Very Good
Alkalies	Excellent	Very Good
Salt	Excellent	Excellent
Solvents	Excellent	Very Good
Water	Excellent	Excellent

- (1) Certain colours may discolour.
- (2) Resistance may vary depending on the type of solvent involved.

WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.