



NAVIMARE-PX
— MARINE & INDUSTRIAL COATINGS —

NAVI_THERM HT-12

Heat Resistant Silicon Coating
Catalog Number : 640-S-9100

FEATURES

- **Heat Resistant**
For Peak temperatures up to 650 °C and ..
operating temperatures of 538 °C.
- **Pure unmodified silicon resin and thermally stable pigments.**
- **Special orders**

RECOMMENDED USES

Exteriors of steel structures exposed to high temperatures, in chemical plants, marine structures, ships, power plants, oil production and refining plants.

Navitherm HT-12 is a high performance, high temperature resistant coating. HT-12 can be used as a self priming coating system over abrasive blast cleaned steel. HT-12 may also be applied over most Zinc Silicate primers, such as Navizinc . Service temp. Must be at least 204 °C.

Can be used on; Stacks, Boiler casings, Breechings, Furnaces, Kilns, Ovens, Piping pumps, manifolds, Process vessels, Stainless steel.

SPECIFICATION DATA

Coating Type	: Silicon resin
Color	: Aluminum RAL 9016 ,640-S-9100 and Red, Black, white
Density (at 20°C); VOC	: 1,15 Kg / Lt. ; VOC: 62% by weight / 677 g/l
Packaging	: 18,0 Lt (20 Kg) Single Component
Gloss	: semi gloss.
Flash Point ; Temp. Resistance	: 18°C ; 538°C dry heat when applied over steel; 400°C when applied over Zinc silicates.
Thinner for cleaning equipment	: Navimare T-5 Thinner. (No thinning recommended.)
Shelf life	: 1 year from shipment date when stored indoors in unopened, original containers at 5 to 40°C.
Volume Solid	: 45% (ASTM D2697,modified)
Theoretical spreading rate	: 18 m ² /Lt. at 25 µm Allow for application losses, surface irregularities, etc.
Application data	: To obtain 30-35 mic DFT. Apply 72-84 mic WFT.
Application	: conventional or airless spray
Curing	: Bake cure at 232 °C 1 Hour or allow to cure in operation. : Operation temp. must be above 204 °C Full film properties are not obtained until heat cured.
Drying time.	: 20° C , %50 RH de. 30 mic. DFT. Touch Dry 1 Hours. Min OC time 24 Hours. Dry to handle 2 Hours Max. OC time: None

Application Properties

Surface preparation

All surfaces must be clean, dry and free of wax, grease, mould remover and other dirt. STEEL - Blast in accordance with Swedish Standard Sa 2½ SIS 05 5900 - 1967 - ISO 8501-1 - or Steel Structures Painting Council SP-10. NOTE: Blast to achieve a 25 to 40 µm profile, as determined with Testex Tape or similar instrument. Remove abrasive residues and dust from surface. IMPORTANT - Apply HT-12 as soon as possible after surface preparation to prevent any contamination. Do not leave blasted steel uncoated overnight. In case of contamination, remove contaminants. Spot blast steel if needed. Zinc Silicate - Surface must be free of any foreign matter. Remove any contamination. Refer to application instructions for the particular Zinc Silicate for any other special top coating requirement. Application Equipment The following equipment is listed as a guide and suitable

Priming, mixing, thinning

HT-12 is a one component material and is packaged in a 20 Lt can. Thinner/cleaner T-5 1. Flush equipment with T-5 before use. 2. Stir all material thoroughly before applying. 3. For conventional spray, thin only as needed for workability with no more than 10% of thinner T-5. Thinning is normally not needed for airless spray. 4. Spray on an even wet coat, making parallel passes and overlapping each pass 50%. Follow with a "cross-spray" pass at right angles to first pass. Give special attention to angles, corners, rough spots, edges, etc., to avoid pinholes, bare areas and holidays. 5. Application at 56 µm wet film thickness will normally provide 25 µm dry film. 6. Check thickness of dry coating with a non-destructive dry film thickness gauge, such as Mikrotest or Elcometer. NOTE: application at excessive thicknesses may result in cracking and insufficient adhesion. 7. To repair or touch up bare areas, pinholes or holidays, simply apply additional materials. Smaller areas may be brushed. Allow 1 hour at 21°C between full coats. 8. In confined areas ventilate with clean air during application and drying until all solvents are removed. Temperature and humidity of ventilating air must be such that moisture condensation will not form on surface. 9. Clean all equipment with T-5 immediately after use or at least at the end of each working day or shift. When left in spray equipment, Ht-12 will cure and cause clogging.

Application

To prevent premature drying, do not apply in direct sunlight. Apply using one of brush, roller or spray methods. The following equipment is listed as a guide and suitable equipment from other manufacturers may be used. Adjustments of pressure and change of tip size may be needed to obtain the proper spray characteristics. AIRLESS SPRAY - Standard airless spray equipment, such as Graco, DeVilbiss, Nordson-Bede, Spee-Flo or others having a 28:1 or higher pump ratio and a fluid tip with a 0.28 to 0.42 mm (0.011 to 0.017 inch) orifice. CONVENTIONAL SPRAY - Industrial equipment such as DeVilbiss MBC or JGA gun with 78 or 765 air cap and "E" fluid tip and heavy mastic spring or Binks No. 18 or 62 with a 66 x 63 PB nozzle setup. Separate air and fluid pressure regulators and a mechanical pot agitator are recommended. A moisture and oil trap in the main air supply line is essential. MIXER - Use power mixer powered by an air motor or an explosion proof electric motor.

Precaution

Refer to material safety data sheet of the product. Additional safety information is available upon request. Minimum safety precautions in dealing with the paints are;

- Take precaution to avoid skin and eye contact (i.e. gloves, goggles, face mask, barrier creams, etc.)
- Provide adequate ventilation
- If the product comes in contact with the skin, wash thoroughly with lukewarm water and soap or suitable industrial cleaner. If the eyes are contaminated flush with water (minimum 10 minutes) and obtain medical attention at once.
- Since these products contain flammable materials, keep away from sparks and open flames. No smoking should be permitted in the area.

Observe all precautionary notices on containers.

Disclaimer

This is not a specification and all information is given in good faith. Since conditions of use are beyond the manufacturer's control, information contained herein is without warranty, implied or otherwise, and final determination of the suitability of any information or material for the use contemplated, the manner of use and whether there is any infringement of patents is the sole responsibility of the user. Manufacturer does not assume any liability in connection with the use of the product relative to coverage, performance or injury. For application in special conditions, Navimare. for detailed recommendations