

APPLICATION INSTRUCTIONS

For product description refer to the product data sheet.

HEMPADUR* MULTI-MIL* 35430

CURING AGENT 95430

- Scope:** These Application Instructions cover the recommendations in connection with the use of HEMPADUR MULTI-MIL 3543 for repair of damaged tank coatings and pittings in cargo tanks.
- Note:** Very deep pittings may counteract solvent evaporation and call for a solvent free product. In such cases HEMPADUR FILLER 3531 is recommended.
- Materials:** **Consumption:**
One set of HEMPADUR MULTI-MIL 3543 (750 ml of mixed paint) is usually sufficient for repair of 15-40 small damaged areas (mechanical damage/pittings).
About 0.5 litre of THINNER 0845 is required to wipe off grinding dust in connection with this repair.
- Note:** HEMPADUR MULTI-MIL 3543 should not be used if any leaking of cans is observed.
- Surface preparation:** **Degreasing:**
Any grease, oil, etc. to be thoroughly removed with HEMPEL'S NAVI WASH 9933 or equivalent. Hose down with fresh water, preferably high pressure fresh water hosing. Allow the surface to dry.
- Removal of rust, scale, and other foreign matter:**
Any loose paint to be removed by high pressure fresh water cleaning or scraping. All rusty areas to be cleaned to bare steel by disc sanding. It is important that all rusty areas are thoroughly cleaned so that no loose rust, rust scale, or loose paint is left. After cleaning the rusty spots any sharp edges to be rounded and the intact, painted area around to be roughened by disc sanding or sand papering.
- It is recommended to use compressed air grinders with a speed of 6000-8000 rpm for the disc sanding. The grinders should be fitted with fibre discs for mounting of coarse grinding paper, i.e. a grain size of 20-40.
- Small, damaged areas (typically at newbuilding stage) and pittings to be cleaned to bare steel by grinding with high speed grinding machines, approximately 20.000 rpm. Tungsten carbide burrs with a burr diameter of 12-15 mm are recommended. It is important that all pittings are thoroughly cleaned to bright metal so that neither rust nor paint is left.
- After thorough removal of dust a final wiping with THINNER 0845 on clean rags is made to completely clean the surface to be repaired.
- Mixing:** Mixing to be done just before application.
- Mix the white BASE 35439 with the red CURING AGENT 95430 in the proportion as delivered, and stir until a completely even, light red colour is obtained.
- Each component is rather thick, but after mixing a brushing consistency is obtained. Thinning must be avoided.
- Pot life:**
- | | | | | |
|----------------------------|-----------|-----------|-----------|-----|
| Temperature of mixed paint | 10°C/50°F | 15°C/59°F | 20°C/68°F | 25° |
| Pot life | 4 hours | 3 hours | 2 hours | 1 |
- Application procedures:** Use a round brush with fairly stiff bristles.
- Apply in a heavy layer to ensure that the applied MULTI-MIL 3543 is thicker than the surrounding, intact, old paint film.

The wet film thickness should usually be approximately 450 micron.

Recoating intervals:

With a maximum of 90% Relative Humidity (RH) the following recoating intervals are valid:

Steel temperature	5°C/41°F	10°C/50°F	15°C/59°F	20°C/68°F
Minimum	40 hours	20 hours	14 hours	10 hours
Maximum	12 days	6 days	4 days	3 days

Curing table:

Provided that adequate ventilation, recommended RH, specified film thickness, and recommended minimum recoating intervals are kept the following is valid:

Steel temperature, °C/°F	5/41	10/50	15/59	20/68	25/77	30/86	35/95	40/104
Fully cured, days	20	14	10	7	5	4	3	2
Initial curing, days	16	8	5	4	3	2	1½	1

Filling of tanks:

The tanks should generally not be taken into use before HEMPADUR MULTI-MIL 3543 is fully cured (see above). However, ballast water and non-aggressive cargoes such as aliphatic chemicals may be carried after an initial curing time as listed above.

Cleaning of tools:

Tools can be cleaned immediately after use with HEMPEL'S THINNER 0845 or HEMPEL'S TOOL CLEANER 9961.

Man hours:

Estimated time needed for repair:

For surface preparation, mixing, and application as described above usually 2 to 4 MULTI-MIL repairs are performed per man hour.

Safety:

Packings are provided with applicable safety labels which should be observed. In addition, Material Safety Data Sheet(s) should be consulted and national or local safety regulations should be followed.

Main points to be observed:

Irritation to eyes and skin.

May cause hypersensitivity in contact with skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After contact with skin, wash immediately with plenty of (liquid) soap and water.

Do not empty into drains.

Wear suitable gloves and eye/face protection.

This Product Data Sheet supersedes those previously issued. For definition and scope, see explanatory notes to applicable Product Data Sheets.

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