

### 47950: BASE 47959: CURING AGENT 98140

**Description:** HEMPADUR MIO 47950 is a two-component polyamide adduct cured, high build epoxy paint which combines a relatively high volume solids content with a short drying time. Has a high load of MIO-pigment.

**Recommended use:** As an intermediate or finishing coat in epoxy systems in atmospheric exposure.

**Service temperature:** Maximum, dry exposure only: 140°C/284°F

**Certificates/Approvals:** Approved according to Network Rail spec NR/L3/CIV/039

**Availability:** Not included in Group Assortment. Availability subject to special agreement.

#### PHYSICAL CONSTANTS:

Shade nos/Colours: 12130\* / (MIO) Grey.  
Finish: Semi-gloss  
Volume solids, %: 76 ± 1  
Theoretical spreading rate: 6.1 m<sup>2</sup>/l [244.6 sq.ft./US gallon] - 125 micron/5 mils  
Flash point: 24 °C [75.2 °F]  
Specific gravity: 1.2 kg/litre [10 lbs/US gallon]  
Dry to touch: 2 approx. hour(s) 20°C/68°F  
Fully cured: 7 day(s) 20°C/68°F  
VOC content: 251 g/l [2.1 lbs/US gallon]

*\*other shades according to assortment list.*

*The physical constants stated are nominal data according to the HEMPEL Group's approved formulas.*

#### APPLICATION DETAILS:

**Version, mixed product:** **47950**  
**Mixing ratio:** BASE 47959: CURING AGENT 98140  
5 : 1 by volume

Application method: Airless spray / Brush  
Thinner (max.vol.): HEMPEL'S THINNER 08450 (5%) depending on purpose (see REMARKS overleaf)  
Pot life: 1 hour(s) 20°C/68°F  
Nozzle orifice: 0.019 - 0.021 "  
Nozzle pressure: 225 bar [3262.5 psi]

(Airless spray data are indicative and subject to adjustment)  
Cleaning of tools: HEMPEL'S TOOL CLEANER 99610  
Indicated film thickness, dry: 125 micron [5 mils] (see REMARKS overleaf)  
Indicated film thickness, wet: 175 micron [7 mils]  
Overcoat interval, min: see REMARKS overleaf  
Overcoat interval, max: see REMARKS overleaf

**Safety:** Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult HEMPEL Safety Data Sheets and follow all local or national safety regulations.

**APPLICATION CONDITIONS:** Apply only on a dry and clean surface with a temperature above the dew point to avoid condensation. Use only where application and curing can proceed at temperatures above: 0°C/32°F. The temperature of the paint itself should be: 15-25°C/59-77°F. In confined spaces provide adequate ventilation during application and drying. It is important that the surface is completely clean to ensure the adhesion. Any oil, grease, etc. to be removed by suitable detergent.

**PRECEDING COAT:** According to specification. Recommended systems are: HEMPADUR ZP 47940, Aluminium/zinc spray-metallisation which preferably is to be "sealed" with: HEMPADUR 17940.

**SUBSEQUENT COAT:** None, or as per specification. Recommended systems are: HEMPATHANE.

**REMARKS:**

**Weathering/service temperatures:** The natural tendency of epoxy coatings to chalk in outdoor exposure and to become more sensitive to mechanical damage and chemical exposure at elevated temperatures is also reflected in this product.

**Application(s):** Application onto zinc metallized and zinc silicate primed surfaces: A proper mist-coat technique is necessary in order to avoid/reduce the risk of "popping"/ "pinholes". Depending on the actual conditions of application, add thinner up to: 50%.

**Film thicknesses/thinning:** May be specified in another film thickness than indicated depending on purpose and area of use. This will alter spreading rate and may influence drying time and overcoating interval. Normal range dry is: 100-150 micron/4-6 mils.

**Overcoating:** Overcoating intervals related to later conditions of exposure: If the maximum overcoating interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion. Before overcoating after exposure in contaminated environment, clean the surface thoroughly with high pressure fresh water hosing and allow drying.

A specification supersedes any guideline overcoat intervals indicated in the table.

Environment	Atmospheric, medium					
	0°C (32°F)		10°C (50°F)		20°C (68°F)	
	Min	Max	Min	Max	Min	Max
HEMPADUR	27 h	Ext.	12 h	Ext.	6 h	Ext.
HEMPATHANE	27 h	Ext.	12 h	Ext.	6 h	Ext.

NR = Not Recommended, Ext. = Extended, m = minute(s), h = hour(s), d = day(s)

**Overcoating note:** A completely clean surface is mandatory to ensure intercoat adhesion, especially at long overcoating intervals. Any dirt, oil, grease, and other foreign matter must be removed with suitable detergent followed by (high pressure) fresh water cleaning. Salts to be removed by fresh water hosing. **Any degraded surface layer, as a result of a long exposure period, must be removed.** Water jetting may be relevant to remove any degraded surface layer and may also replace the above mentioned cleaning methods when properly executed. Consult HEMPEL for specific advice if in doubt. To check whether the quality of the surface cleaning is adequate, a test patch may be relevant. However, this test patch should not be a final proof of the durability of the coating systems.

**Overcoating intervals:** The product may provide extended overcoating properties if it is applied in a way that allows a MIO structure to develop. This may necessitate application of the product in reduced film thickness, down to: 50 micron/2 mils. For such purpose, addition of a thinner is recommended: HEMPEL'S THINNER 08450, 5-10%.

**Note:** **HEMPADUR MIO 47950 For professional use only.**

**ISSUED BY:** HEMPEL A/S 4795012130

This Product Data Sheet supersedes those previously issued.  
For explanations, definitions and scope, see "Explanatory Notes" available on [www.hempel.com](http://www.hempel.com). Data, specifications, directions and recommendations given in this data sheet represent only test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use of the Products herein must be determined exclusively by the Buyer and/or User.  
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