

Technical Data Sheet

HYDROTHERM® 600 MIO AL

Serie 160058

PRODUCT DESCRIPTION

Fast drying water based silicone paint with micaceous iron oxide and aluminium, for protection of structures exposed to high temperatures (up to 600°C).

INTENDED USES

Particularly suitable as a single coat for protection of steel and stainless steel structures exposed to high temperatures (up to 600°C) as stoves, heat exchangers or muffler. HYDROTHERM 600 MIO AL can be used in combination with zinc silicate coatings and zinc silicone coatings (up to 400°C).

TECHNICAL INFORMATION

Product type	Water based modified silicone coat			
Colours	Aluminium			
Solids (% +/- 2)	50 (by Volume)	62 (by Weight)	SOV/VOC (g/liter)	<130 Directive 2004/42/CE
Specific Gravity (g/liter +/- 100)	1400		SOV/VOC (g/liter) (calculated)	<130 Directive 2010/75/CE
Flash Point (°C +/- 2)	not flammable			
Appearance	matt, textured			
Temperature Resistance (°C)	600 (dry)			

APPLICATION DATA

Application Range	Film thickness per coat in micron		Theoretical spreading rate		Consumption
	Dry	Wet	m ² /l	m ² /kg	
(min - max)	25 - 50	50 - 100	20 - 10	14.3 - 7.1	-
Typical	40	80	12.5	8.9	112

Room Temperature	min 10°C	Max 40°C	Relative Humidity	min 5%	Max 70%
Mixing Ratio	---				
Pot life	N.A.				
Thinner/Cleaner	clear water (2-3% max. by weight)				

Application methods Airless or conventional spray, brush or roller.

Guideline for airless spray

Pressure at nozzle	15 Mpa (150 kp/cm ² , 2100 psi)
Nozzle tip	0,46 - 0,58 mm (0,018 - 0,023")

Ti.Pi.Ci. s.a.s. di C.M. Pinto & C.

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SURFACE PREPARATION

STEEL: must be undamaged, degreased and dry, a more thorough preparation (blast cleaning to Sa 3 - Sa 2,5) will improve the performance.

STAINLESS STEEL: must be undamaged, degreased and dry.

CONDITION DURING APPLICATION

the temperature of the substrate should be min. 10°C and min. 3°C above the dew point of the air. The temperature and relative humidity should be measured in the vicinity of the substrate.

DRYING TIMES

Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. The figures given in the table are typical with: good ventilation (outdoor exposure or free circulation of air), recommended film thickness, one coat on top of inert substrate.

Substrate temperature	Surface Dry ¹	Hard Dry ²	Cured ³	Dry to recoat ⁴	
				minimum ⁵	Maximum ⁶
10°C		1 h	48 h	3 h	-
20°C		30 - 45 min	24 h	2 h	-
30°C		30 min.	24 h	1 h	-

- 1
- 2 Data resulted by tests and experience in pratical applications. A good ventilation can improve the drying time.
- 3 Data resulted by tests and experience in pratical applications.
- 4 As provided for recoating with the same generic type of paint.
- 5 In case of multi-coat application, drying times will be influenced by the number in sequence and by the total thickness of previous coat applied.
- 6 The surface should be dry and free from contaminants before applying the next coat.

Given data must be considered as guidelines only. Actual drying time can only be decided at site, depending on age of existing system, generic types, numbers of coates, thinning, temperature, ventilation, etc.

THIS PRODUCT IS INTENDED FOR PROFESSIONAL USE ONLY

The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to Ti.Pi.Ci.'s technical documentation.

STORAGE AND PACKAGING

STORAGE the product should be stored in accordance with national regulations. The best storage conditions are to keep the packages in a dry space provided with adequate ventilation.

SHELF LIFE 12 months at room temperature.

PACKAGING 5 kg

HEALTH AND SAFETY

For detailed information on the health and safety hazards and precautions for the use of this product, we refer to the Material Safety Data Sheet.

Disclaimer

The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product is often used under contitions beyond our control, we can not guarantee anything but the quality of the product itself. We reserve the right to change the given data without notice.

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