

TECHNICAL DATA SHEET

PERMABOND HR 620

SILICONE H.R. FINISH

DESCRIPTION:	A modified silicon-based heat resistant aluminum paint for atmospheric exposure conditions, having good weather resistance. It has good flow and leveling and has heat resistance up to 600°C. It should preferably be applied by spray to get the best results.	
RECOMMENDED USE:	A heat resisting paint for steel structure, pipes, power stations, high temperature stacks, boilers, engines, exhaust lines, etc. where heat resistance up to 620°C is required.	
RESISTANCE TO:	Moisture - Good Weather - Good	Abrasion – Good Heat - Excellent
PRODUCT INFORMATION:		
Colour:	Aluminum	
Finish:	Semi-matt	
Volume solids %:	40 ± 2% (ASTM-D2697-86)	
V.O.C.:	600 g/l (NB. – Thinning will affect VOC compliance and volume solids)	
Typical thickness:	25 - 30 microns dry film thickness	
Theoretical coverage:	16 m ² /ltr. @ 25 microns dft	
Flash point:	28°C	
Mixing ratio:	Single pack	
Shelf life:	24 months from the date of manufacture	
Pot life:	Not applicable	
Pack size:	20 & 5 litres unit	

FILM THICKNESS AND SPREADING RATE:	MIN.	MAX.	UNIT
Wet film thickness	62.5	75	µm
Dry film thickness	25	30	µm
Spreading rate	16	13.3	m ² /l (theoretical)

This figure makes no allowance for surface profile, uneven application, overspray or losses in containers and equipment. Film thickness will vary depending on actual use and specification.

SERVICE TEMPERATURE: 620°C maximum dry

RECOMMENDED THINNER: Thinner No. 2 (5%)

DRYING & CURING TIME:

SUBSTRATE TEMPERATURE	15°C	23°C	35°C
Touch dry	2 hours	1 hour	¾ hour
Dried to over coat (minimum)	36 hours	24 hours	18 hours
Hard dry	36 hours	24 hours	18 hours

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SURFACE PREPARATION:

Remove all oil and grease in accordance with SSPC-SP1. Manually prepared surfaces should be prepared in accordance with SSPC-SP2 or SSPC-SP3. For more severe exposure, conditions blast cleaning to SSPC-SP 7 may be required. Abrasive blast clean to Sa 2 ½ BS7079:Part A1:1989. Average surface Profile 35 - 75 microns.

RECOMMENDED COATING SYSTEM:

FOR OPERATING TEMPERATURE

200°C TO 450°C

Use PERMAZINE IO 90 as primer

ABOVE 450°C TO 620°C

Use PERMABOND HR 620 itself as primer coat.

RECOMMENDED APPLICATION METHODS:

Airless spray, conventional spray, roller, brush

APPLICATION EQUIPMENT DETAILS:

1.AIRLESS SPRAY

Nozzle Size: 0.38mm (15 thou)

Fan Angle: 30°

Operating Pressure: 233kg/cm² (3300 psi)

2.CONVENTIONAL SPRAY

Nozzle Size: 1.27mm (50 thou)

Atomising Pressure: 2.8kg/cm² (40 psi)

Fluid Pressure: 0.7kg/cm² (10 psi)

APPLICATION CONDITIONS AND OVER COATINGS:

This material should preferably be applied at temperatures in excess of 10°C. In conditions of high relative humidity, i.e. 80-85%, good ventilation conditions are essential. Substrate temperature should be at least 3°C above the dew point and always above 0°C. At application temperatures below 10°C, drying and curing times will be significantly extended, and spraying characteristics may be impaired. Application at ambient air temperatures below 5°C is not recommended.

HEALTH AND SAFETY:

Please observe the precautionary notices displayed on the container. Do not breathe or inhale mist. Avoid skin contact. Spillage on the skin should immediately be removed with suitable cleanser, soap and water. Eyes should be well flushed with water and medical attention sought immediately.

Consult Product Health and Material Safety Data Sheet for information on safe storage, handling and application of this product.

Disclaimer: The information in this document is given to the best of KPC Paint's knowledge that based on laboratory testing and practical experience Products are often used under conditions beyond KPC's control and KPC Paints cannot guarantee anything but the quality of the product itself.

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