

PREBOND-HR (Heat Resistant Paint 600°C)



★ **PRODUCT NAME: PREBOND-HR (Heat Resistant Aluminum Paint 600°C)**

★ **PRODUCT DESCRIPTION: PREBOND-HR** is a high-performance, single-component, ready-to-use modified silicone coating formulated with novel silanes and ultrafine aluminum pigments. It provides excellent dry heat resistance up-to 600°C together with outstanding corrosion, weather, U/v, salt-water and chemical fume resistance. The coating is a direct-to-metal system requiring no primer or special application technique, delivering a smooth glossy aluminum finish and extended corrosion protection for industrial equipment operating under high-temperature conditions.

★ **KEY FEATURES:**

- Smooth glossy aluminum finish with high coverage.
- Single component, no mixing errors or pot life limitations.
- Suitable for fire-flame exposed equipment and marine environments.
- Excellent high-heat corrosion, chemical, weather, U/v, moisture and salt-water resistance.

★ **TECHNICAL DATA:**

Property	Specification
Colour	Aluminum
Coverage	08–10 Sq. Mtr. in Per Liter
Viscosity @27°C	27 ± 2 seconds
Solid Content	45%
DFT per Coat	35–40 um microns per coat
Drying Time	Touch Dry: 10 min Hard Dry: 12 hrs
Finish	Hard & Matt Glossy
Adhesion	100% (IS 101 Cross Hatch) after heat curing
Flexibility	Passes OT Bend Test
Scratch Hardness	Excellent after heat curing
Dry Heat Resistance	Stable, non-peeling, no flaking at 600°C
Acid/Alkali Fumes	Excellent (ASTM D6943)
Impact Resistance	Excellent (ASTM D2794)
U/v, Weather Resistance	03–04 years* additional protection
Salt Spray	Passes 500 hrs (ASTM B117, 2 coats)

PREBOND-HR (Heat Resistant Paint 600°C)



★ APPLICATION PROCEDURE:

Item	Details
Mixing	Ready to use; stir well before application.
Application Methods	Brush, roller, air spray or airless spray.
Thinner	Do not use any types of thinner on its application.
Recommended Coats	02 coats with 06 hours interval.
Surface Preparation	Remove rust and loose scale using wire brush.
Shelf Life	12 months in unopened container.
Packing	20 liters in printed mild steel drum.

★ **RECOMMENDED APPLICATION:** Chimneys, boilers, furnaces, hot pipelines, heat exchangers, duct collectors, ESP systems, ovens, kilns, storage tanks, manifolds, mufflers, exhausts, automotive silencers, turbines, foundry equipment, power plant machinery, structural steel and similar high-temperature metal surfaces.

★ WHY CHOOSE PREBOND-HR:

- 1. No Primer Needed:** Direct application on metal. Saves time & labour cost.
- 2. Result:** Hassle-free, error-free, faster application with reliable heat protection.
- 3. Single-Component:** Ready to use. No mixing of aluminum paste into varnish. No ratio errors.
- 4. Fast Drying:** Touch dry in 10 minutes. No tacky film or handling issues like conventional HR paints.



For, more any other technical details of the products & our services, please contact us. +91-9011926733, +91-9307742241

alexindia20@gmail.com, www.acidresistantpaint.com, www.alexindia.in

PREBOND-HR – Heat Resistant Aluminium Paint

Heat Resistant Aluminum Paint

High Temperature Resistant Paint for Industrial Metal Surfaces

Product Overview

PREBOND-HR is a heat resistant aluminium paint developed to protect industrial metal surfaces exposed to high operating temperatures while providing a durable protective finish. It is a single-component, ready-to-use silicone heat resistant paint formulated with a silicone modified polymer and ultrafine aluminum pigment base, offering excellent protection up to 600°C.

It is formulated for industrial equipment, exhaust systems, pipelines, boilers, furnaces and machinery that require reliable protection under elevated temperatures, including chimneys, tubes, duct collectors, tanks, mufflers, manifolds, automotive silencers and heater baffles. As a DTM (Direct to Metal) coating, PREBOND-HR does not require any special surface treatment or primer before application.

PREBOND-HR combines excellent adhesion, long-lasting durability, reliable heat resistance and industrial surface protection, along with chemical fumes resistance and additional fire flame retardant, water, weather, moisture and UV resistance, making it suitable for demanding industrial applications.

Key Benefits

Heat resistant aluminium paint with excellent adhesion and no mixing errors or pot life issues

Provides corrosion resistant high temp paint performance, protecting metal at continuous temperatures up to 600°C

Silicone heat resistant paint formulated with silicone modified polymer and ultrafine aluminum pigment

Additional fire flame retardant properties along with water, weather, moisture and UV resistance

Suitable for exhaust pipe heat paint and silencer coating paint applications on automotive and industrial parts

Reliable for boiler chimney painting, furnaces, duct collectors, pipelines, tanks, mufflers and manifolds

DTM (Direct to Metal) coating that does not require a special primer before application

Physical Properties

Color	Silver Metallic Aluminum
Flammability	Flammable
Viscosity at 27°C	35±5 seconds
Dry Film Thickness (DFT)	25-40 um microns DFT per coat
Drying Time	Touch Dry 10 Minutes, Hard Dry: 06 Hour, Full cure: 24 Hour

Flexibility	Passes OT bend test
Adhesion (by cross hatch method)	Excellent (After Curing Heat)
Dry Heat Resistant	Excellent (After Curing Heat) up-to 600°C
Chemical Fumes Resistant	Excellent (without cracking / chipping of paint film)
Salt Spray (ASTM B117)	Pass the test (300 hours After Curing Heat) 02 coats
Method of Application	Brush, roller, spray or dipping
Coverage	08-10 Sq. Mtr. area in per liter (single coat)
Recommend Coats	Apply 02 coats for better result
Surface Preparation	Clean the surface well by using wire-brush
For Rusted Surface	Use PREBOND-58 (Anti Rust Chemical) for better results.
Packing & Storage	20 Liters in newly printed mild steel drum

Applications of PREBOND-HR Heat Resistant Aluminium Paint

Industrial Boilers

Heat resistant aluminium paint protection for boiler surfaces exposed to continuous heat.

Furnaces

Reliable high temperature resistant paint performance on industrial furnace surfaces.

Chimneys

Durable protection for boiler chimney painting and industrial chimney structures.

Exhaust Systems

Suitable as an exhaust pipe heat paint for automotive and industrial exhaust systems.

Heat Exchangers

Industrial metal coating for heat exchanger surfaces exposed to elevated temperatures.

Industrial Pipelines

Corrosion resistant high temp paint for pipelines carrying heated fluids or gases.

Manufacturing Equipment

Long-lasting protective finish for manufacturing equipment operating at high temperatures.

Metal Structures Exposed to Heat

Silencer coating paint and general protection for metal structures facing continuous heat.

Frequently Asked Questions

What is PREBOND-HR used for?

PREBOND-HR is used to protect industrial metal surfaces exposed to high temperatures, including boilers, furnaces, exhaust systems, and pipelines.

Can PREBOND-HR be applied on metal equipment?

Yes. PREBOND-HR is designed for properly prepared metal surfaces used in industrial high-temperature environments.

Where is PREBOND-HR commonly used?

PREBOND-HR is commonly used in industrial plants, manufacturing facilities, power generation equipment, and other applications where heat resistant metal coatings are required.