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RUDRA PAINT



PLOT NO. 60/61, PANDOL INDUSTRIAL AREA, VED ROAD, KATARGAM,
SURAT, GUJARAT -395004

TECHNICAL DATA SHEET RP-201

HEAT RESISTANT 200°C

PRODUCT DESCRIPTION

Heat Resistant Aluminium Paint is a single-component, metallic aluminium pigmented, air-drying protective coating formulated with specially modified silicone polymers. The coating is designed to provide long-term protection against corrosion, oxidation, weathering, and moderate heat exposure up to 200°C continuous service temperature.

The aluminium pigmentation forms a reflective metallic barrier that minimizes heat absorption and enhances resistance to atmospheric degradation. The coating offers excellent durability and decorative appearance while protecting metal surfaces exposed to elevated temperatures.

PRODUCT FEATURES

- Single-pack, ready-to-use coating.
- Air-drying system with easy application.
- Withstands continuous temperatures up to 200°C.
- Excellent corrosion and oxidation resistance.
- Metallic aluminium finish with high reflectivity.
- Good resistance to moisture, weathering, and UV exposure.
- Excellent adhesion on properly prepared surfaces.
- Fast drying and easy maintenance.
- Suitable for interior and exterior industrial applications.
- Resistant to mild acids, alkalis, and industrial atmospheres.

RECOMMENDED USES

Recommended for protection of metal surfaces subjected to moderate heat and corrosive environments:

Industrial Applications

- Chimneys and stacks
- Process pipelines
- Ducting systems
- Storage tanks
- Industrial structures

Thermal Equipment

- Boiler jackets
- Heat exchangers
- Drying kilns
- Industrial ovens
- Furnaces operating within temperature limits

Mechanical Equipment

- Hot rolling mill machinery
- Process equipment
- Compressors and blowers

Automotive Components

- Engine housings
- Exhaust systems
- Silencers and mufflers

Power Generation Equipment

- Turbines
- Generators
- Auxiliary equipment
- Heat recovery systems

TECHNICAL DATA

Property	Value
Product Type	Silicone-Based Heat Resistant Coating
Colour	Aluminium (silver), Black, Blue, Red
Finish	Smooth Metallic Gloss
Components	Single Pack
Volume Solids	50 ± 5%
Theoretical Coverage	10 – 15 m ² /Litre per coat
Recommended DFT	20 ± 5 Microns per coat
Recommended WFT	40 – 50 Microns per coat
Specific Gravity	1.00 – 1.20
Flash Point	Above 30°C
Service Temperature	Up to 200°C Continuous
Application Methods	Brush, Roller, Air Spray, Airless Spray, Dipping, Flow Coating, Curtain Coating

FILM PROPERTIES

Drying Characteristics

Property	Time
Touch Dry	60 Minutes
Hard Dry	24 Hours
Recoat Interval	Minimum 12 Hours
Full Cure	7 Days

Finish

Glossy, smooth metallic finish.

Adhesion

100% adhesion by Cross Hatch Test.

Flexibility

Passes O-T Bend Test.

Scratch Hardness

Minimum 1000 grams.

Impact Resistance

Greater than 60 kg-cm.

Weather Resistance

Excellent; suitable for prolonged outdoor exposure.

UV Resistance

Excellent.

CHEMICAL RESISTANCE

Test Medium	Performance
Water	Excellent
3% Hydrochloric Acid (HCl)	Excellent
3% Sodium Hydroxide (NaOH)	Excellent
Industrial Atmosphere	Excellent
Mild Solvents	Excellent

TEMPERATURE RESISTANCE

Condition	Temperature
Continuous Service	Up to 200°C
Intermittent Exposure	Up to 250°C

The coating maintains its protective and decorative properties under continuous exposure to temperatures up to 200°C.

SURFACE PREPARATION

Proper surface preparation is essential to achieve optimum performance.

Cleaning

All surfaces must be clean, dry, and free from:

- Oil
- Grease
- Dust
- Rust
- Mill scale
- Moisture
- Loose paint and contaminants

Degreasing

Remove oil and grease by:

- Solvent cleaning
- Emulsion degreasing
- Approved industrial cleaners

Steel Surfaces

- Abrasive blast cleaning to Sa 2½ (ISO 8501-1) is recommended.
- Mechanical cleaning using power tools may be used where blasting is impractical.
- Remove all rust, scale, and loose particles.

Priming

For optimum corrosion protection, apply a suitable heat-resistant primer before the application of Heat Resistant Aluminium Paint.

APPLICATION PROCEDURE

Mixing

The product is supplied as a single-pack coating.

- Stir thoroughly before use until a uniform consistency is obtained.
- Continue occasional stirring during application.

Application Methods

The coating may be applied by:

- Brush
- Roller
- Conventional Air Spray
- Airless Spray
- Dipping
- Flow Coating
- Curtain Coating

Thinning

Use only the recommended Silicone Thinner.

Application Method	Thinner Addition
Brush/Roller	Up to 5%
Air Spray	10–15%
Airless Spray	Up to 5%

Do not over-thin the material as this may reduce film build and performance.

FILM THICKNESS

- Recommended Wet Film Thickness (WFT): 40–50 Microns
- Recommended Dry Film Thickness (DFT): 20 ± 5 Microns per coat

Additional coats may be applied where higher film build is required.

CURING

Under ambient conditions:

- Touch Dry: 60 Minutes
- Hard Dry: 24 Hours

For faster curing, the coating may be stove-dried at 120°C for approximately 1 hour after flash-off.

STORAGE

Store in accordance with local and national regulations.

Storage Conditions

- Store in a cool, dry, and well-ventilated area.
- Keep away from direct sunlight.
- Protect from heat, sparks, and open flames.
- Keep containers tightly closed when not in use.

Shelf Life

12 months from the date of manufacture when stored in original unopened containers.

PACKING

- 20 Litre Containers
- 200 Litre Drums

Other pack sizes available upon request.

HEALTH & SAFETY

- Use only in well-ventilated areas.
- Avoid inhalation of spray mist and solvent vapours.
- Wear suitable gloves, goggles, and respiratory protection.
- Avoid contact with skin and eyes.
- Wash exposed skin thoroughly after use.
- Keep away from ignition sources.
- Keep out of reach of children.

First Aid

Skin Contact: Wash with soap and water.

Eye Contact: Flush immediately with plenty of clean water and seek medical attention.

Inhalation: Move the affected person to fresh air and seek medical advice if symptoms persist.

Refer to the Safety Data Sheet (SDS) before use.

QUALITY ASSURANCE

Manufactured under stringent quality control procedures to ensure consistent performance, durability, and long-term protection of metal surfaces exposed to heat and corrosive industrial environments.



Mfg by **RUDRA ENTERPRISE**

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THE FUTURE OF SURFACE PROTECTION

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