

Rust Converter
Technical Data Sheet
Version 1.0

1. Product Description

Rust Converter is a **water-based rust treatment and protective coating** designed to convert iron oxide (rust) into a stable, inert surface while forming a protective barrier over the treated metal. The formulation reacts with rust on ferrous metal surfaces to create a protective layer that helps prevent further corrosion.

Once applied, the product forms a **durable coating suitable for subsequent protective coatings or paint systems**.

2. Recommended Use

- **Rust treatment for ferrous metal surfaces**
- **Steel structures and metal components**
- **Preparation of rusted metal prior to painting**
- **Corrosion control on structural steel and fabricated metal**

Not recommended for **non-ferrous metals, galvanized surfaces, or surfaces intended for food or potable water contact**.

3. Key Features and Benefits

- **Converts rust into a stable protective layer**
 - **Improves adhesion of subsequent coatings**
 - **Water-based formulation**
 - **Forms a protective barrier against corrosion**
 - **Suitable for steel and ferrous metal substrates**
 - **Can be used as part of corrosion control systems**
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4. Safety and Handling

Read all container labels before use and follow **standard safety procedures**.

Refer to the **Safety Data Sheet (SDS)** for detailed information regarding:

- Personal protective equipment
- Ventilation requirements
- Spill response procedures
- Safe handling and disposal

Avoid contact with **eyes and skin** and prevent release into **drains or waterways**.

5. Product Information

Product Type: Rust converter / corrosion treatment coating

Solvent: Water

Appearance: Coloured acrylic dispersion

Odor: Mild acrylic / polymer odor

pH: 4 – 6

Relative Density: 1.30 – 1.50

Flash Point: >100 °C (water based)

Boiling Point: ~100 °C

Solubility: Miscible when wet, insoluble when dry

VOC Content: <60 g/L

6. Surface Preparation

Proper surface preparation is essential for effective rust conversion and coating adhesion.

Recommended preparation includes:

- Remove **loose rust, scale, and flaking coatings**
- Remove **oil, grease, dirt, and contaminants**
- Clean surfaces thoroughly prior to application
- Ensure metal surface is **dry and structurally sound**

Heavy rust should be **mechanically cleaned** before treatment.

7. Application Details

Rust Converter may be applied using:

- **Brush**
- **Roller**
- **Spray application**

Apply evenly to rusted metal surfaces ensuring **complete coverage of affected areas**.

Allow sufficient time for the product to **react with rust and form a protective coating layer**.

8. Application Conditions

- Apply only to **clean, dry metal surfaces**
 - Do not apply to **wet or contaminated substrates**
 - Avoid application in **rain or high humidity conditions**
 - Ensure **adequate ventilation when spraying**
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9. Drying and Reaction Time

Drying and reaction time may vary depending on **temperature, humidity, and coating thickness**.

Typical drying behaviour:

Touch Dry: Approximately **1–2 hours at 20 °C**

Recoating: After full conversion and drying of the treated surface

Environmental conditions may **affect drying performance**.

10. Performance Summary

Advantages

- **Converts rust into a stable protective layer**
- **Reduces further corrosion of metal surfaces**
- **Improves adhesion of subsequent coatings**
- **Suitable for structural steel and metal components**

Limitations

- **For use on ferrous metals only**
 - Not suitable for **galvanized or non-ferrous metals**
 - Not intended for **food contact surfaces or potable water systems**
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11. Storage and Shelf Life

Store in the **original sealed container** in a **cool, dry, well-ventilated area**.

Storage conditions

- **Temperature range:** 5 °C – 35 °C
- **Protect from freezing**
- Keep containers **tightly closed when not in use**

Shelf life: 24 months when stored correctly

12. Environmental Information

- **Harmful to aquatic life with long lasting effects**
 - Prevent release into **drains, waterways, or soil**
 - Dispose of product and containers in accordance with **local regulations**
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13. Disclaimer

The information provided in this **Technical Data Sheet** is based on current technical knowledge and experience. It is offered as guidance only and does not constitute a guarantee of product performance in all situations. Users must determine suitability for their **specific application conditions**.