



Product Information (02.02.22)

PRODUCT DESCRIPTION

RUST BASE is a high-performance rust encapsulation coating that protects metal surfaces from corrosion. RUST BASE seals iron, steel, and most other metals and can be applied directly over rust and firmly bonded paint. RUST BASE also provides superior protection for concrete, wood and fiberglass. RUST BASE is abrasion, chip, chemical and UV resistant. Use RUST BASE as a primer for other Coatable products or as a single coating system.

RECOMMENDED USES

Industrial exterior coating for all rusted metal - I beams - structural steel - pipes -

sealing concrete - AC unit/ducting - fiberglass - rebar - gas and; fuel tanks.

Home & Farm metal roof/walls - hand rails - lawn equipment - farm equipment - garage

floors - appliances.

Automotive chassis - truck bed - trunks - axles - floor pans - fenders - engine - wheel wells

Marine engine rooms - hulls - masts - bilges - heat exchangers - metal decks -

chain lockers - pumps - trailers

APPLICATION PROCEDURE

Do not shake the container. Stir thoroughly, until coating is a silver color. Do not create a vortex when mixing. Use outdoors or in a well-ventilated area. Ideal application temperature is between 50F (10C) and 90F (32C); humidity below 90% to ensure proper drying. Do not apply to surfaces that exceed 150F (65C). RUST BASE may be applied by brush, roller, or spray equipment. Test a small area for proper adhesion. RUST BASE works best when pressed firmly against a substrate. Apply RUST BASE evenly without build up. A minimum of 2 coats of RUST BASE must be applied to achieve a minimum dft (dry film thickness) of 6-8 mils. A minimum dft of 12 mils is recommended for heavy industrial or marine use. Typical areas where stripe coats must be applied include welds, corners, edges and heavily pitted areas.

Average drying time is between 2 to 6 hours. RUST BASE cures faster on humid days and slower on a dry days. Note: The above drying times are only estimates. Actual drying times can vary significantly based on relative humidity, dry film thickness, wind, direct sunlight, temperature, and other factors. Previous coats of RUST BASE should be dry to the touch with no transfer of coating to a gloved finger before applying additional coats of RUST BASE or another topcoat. For optimum inter-coat adhesion apply the next coat as soon as the previous coat is touch to dry. If more than 12 hours have passed, wait at least 24 hours then rough up the surface with 150 grit sand paper before applying additional coats. RUST BASE is a metallic silver in color and does not require a topcoat. If a color other than metallic silver is desired, Coatable offers STOP HEAT & NOVA SHINE. If using another brand top coat, it is recommended to first check for compatibility and follow the manufacturer's recommendations. A small surface area should be tested for adhesion and compatibility.

Top coats must be applied within 12 hours of the final coat of RUST BASE. Indefinite submersion requires an epoxy topcoat. Remember to limit the time the container is left open. Only pour what you need and then close the container to minimize air entry and avoid skinning. A thin plastic bag may be placed between the lid and the container. Cure time varies based on relative humidity and temperature of the surface; approximately 80% in 4 hours; fully cured in 72 hours. Cannot be used with organic zinc primers or ammonia.

MINIMUM SPREAD RATE

On non-textured flat surfaces, each coat of RUST BASE covers approximately 200 sq. ft. per gallon (18.5 sq. mtr/gallon) at 8 mils wet / 4 mils dry (200 micron wet / 100 micron dry). Clean white flat metal requires only 1 coat (4 mils DFT), rusted metal requires 2 coats (8 mils DFT), heavy industrial and marine requires 3 coats (12 mils DFT).

PRODUCT CHARACTERISTICS

- · Moisture-cure Polyurethane. Cures by absorbing moisture in the air
- Solids: By weight 62.2% / By volume 51.4%
- 30-60 MINUTES TO TACK FREE AT 70°F (21°C)
- Overcoat window is three hours or less at 70°F (21°C)
- Net Weight: 9.1 lbs. per gallon
- Shelf Life: Up to 3 years (unopened) under appropriate storage condition (see MSDS)
- · Single component coating; No curing agent needed
- VOC Level: 380 grams/liter; 3.17 lb./gal.
- · Metallic Silver in color; not available in colors
- Resistant to most solvents, chemicals and some acids
- Maximum Surface Temperature when applying; 150°F (65°C)
- Minimum Surface Temperature when applying; 50°F (10°C)
- Maximum Surface Temperature after curing; 325°F (163°C)
- Failure will occur at a constant temperature equal to or greater than 302°F (150°C)

SAFETY PRECUATIONS

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: proper ventilation, use of proper lamps, wearing of protective clothing and masks, tenting, and proper separation of application areas. This coating is flammable. Keep away from fire, or other sources of ignition. For more specific safety procedures, please refer to the RUST BASE SDS. KEEP OUT OF REACH OF CHILDREN.

Limitation of Liability: The information contained in this data sheet is based upon tests that we believe to be accurate and is intended for guidance only. All recommendations or suggestions relating to the use of the products made by Coatable LLC, whether in technical documentation, or in response to a specific enquiry, or otherwise, are based on data which to the best of our knowledge is reliable. The products and information are designed for users having the requisite knowledge is reliable. The products and the responsibility to determine the suitability of the product for its intended use. Coatable has no control over either the quality of condition of the substrate, or the many factors affecting the use and application of the product. Therefore, Coatable LLC does not accept any liability arising from loss, injury, or damage resulting from such use or the contents of this data sheet (unless there are written agreements stating otherwise). The information contained in this data sheet is subject to modification as a result of practical experience and continuous product development. This data sheet replaces and annuls all previous issues and the user has the responsibility to ensure that this sheet is current prior to using the product.





Application Information (02.02.22)

SURFACE PREPARATION

Surface must be clean from oil, tar, rust, grease, salts, and films.

- 1. Use general degreaser if needed.
- 2. Clean surface using TSP (tri-sodium-phosphate) or a citrus cleaner to release dirt and degreaser residue.
- 3. Pressure-wash, if possible @ 3500 psi.
- 4. Salt contamination on a surface can come as a result of salt water, fertilizers, and car exhaust. Use Chlor*Rid or equivalent to decontaminate surface if salts are present. Acceptable levels: Nitrates: 5-10 mcg/cm², Sulfates: 5-10 mcg/cm², Chlorides: 3-5 mcg/cm²

Surface must be completely dry before applying.

- RUST BASE must be applied during proper temperatures and the prescribed overcoat window of the coating over which it will be applied.
- 2. If applied over an existing coating having a glossed or shiny finish, it must be sanded and roughed to remove gloss before application, to improve the profile. This also applies to coats of RUST BASE if 24 hours have lapsed. Additional coats of RUST BASE can only be applied when the 1 coat becomes
- 3. tacky to the touch and has little to no transfer of coating; in most cases, 1-2 hours or less. After this stage, the surface must be lightly sanded to improve the profile.

NOTE: If pack rust or mil-scale exists, they must be removed by grit blast, power tool or pneumatic zip gun. Glossy surfaces should be sanded to a dull finish to improve the profile and enhance adhesion. If mil-scale exists on hot rolled steel, the pores will be blocked, and the surface must be taken to a SSPC – SP6 or SP11. Once these steps are taken, begin Surface Preparation Instructions. (Above)

NOTE: Never use a needle gun. This compacts rust into the pores and blocks RUST BASE from anchoring.

MIXING INSTRUCTIONS

Mix by hand or power drill using low to medium speed with NO vortex. Mix until pail turns silver metallic, then mix two more minutes making sure all the metallic paste is off the bottom.

ONCE OPENED, PAIL WORKABILITY CHANGES ACCORDING TO AMBIENT CONDITIONS – 4 hours at 70°F degrees (21°C) at 60% or higher Relative Humidity. Cooler temperatures or lower humidity, more workability time. Warmer temperature or high humidity; less workability time.

CURE TIME

RUST BASE: 30-60 minutes to tack-free when 70°F. (21°C) at 40% relative humidity; fully cures in thirty days when 70°F (21°C) at 40% relative humidity.

APPLICATION

- RUST BASE can be applied by soft bristle brush or ¼" nap roller made for solvent use or spray. If application is by spray, use a standard airless sprayer (1.5 gallons/minute at 3,300 psi) with a .013-.017 tip.
- In all applications (brush or roller), apply at "half-speed" and use a cross-hatch method (side-to-side, then top-to-bottom) slowly to prevent pinholes and allow penetration.

- 3. If encapsulating rust, lead-based paint, other bio-hazardous materials or bridges, brushing is the preferred application method. Apply the first coat by brush (keeping it very wet at all times), using the cross- hatch method. Go about 30 feet then return to the beginning and apply a second coat identical to the first. A third coat may be required. This method will ensure the coating is worked into the pores and fully encapsulates the existing surface, while leaving enough coating over the surface to avoid pinholes.
 - Maximum/minimum surface temperature when applying: 150°F (65°C) / 50°F (10°C)
 - Maximum surface temperature after curing: 325°F (163°C)
 - Failure will occur at a constant temperature =/> 325°F (163°C)

APPLICATION NOTES

- 1. The number of coats necessary and the thickness of each will be in accordance with the job specifications, blast profile, or rust profile.
- Temperatures must always be a minimum of 5 degrees above the dew point during application. If there is a minimum of 5mph of wind, this can keep the surface dry.
- 3. At high RH values of 60% or more, RUST BASE cures very quickly and the window for applying another layer of coating is very short. At 85% RH, it could be determined that one has only an hour or less over-coat window depending on the ambient temperature. The higher the temperature, the faster solvents evaporate out of the coating. It is always best to overcoat immediately when the first coat of RUST BASE becomes dry to the touch. Since the curing process is so dependent on ambient temperature and RH, the physical touch-test is always the best approach when working in high humidity environments. RH of 60% and up.
- 4. Surface profile must be factored when estimating the spread rate and amount of product required. Allow for penetration into the profile and adjust accordingly (i.e. if the profile takes 2 mil (50 micron) to fill before achieving the 6 mils dry(150 microns) then you must figure 8 mil (200 microns) dry as the appropriate spread rate).
- 5. Over very rough surfaces apply RUST BASE at a minimum thickness of 12 mils wet/6 mils dry. Dry film thickness must be at least 4 mils (100 microns) over the highest peaks of the surface profile. Allow for absorption into the substrate and filling profile when figuring spread rate.
- Use Acetone to aid in drying surface before applying RUST BASE, when needed. DO NOT use mineral spirits or any other solvent for this purpose.

CLEANING EQUIPMENT

- If breaks are taken, spray systems should be flushed with solvent. After completion, spray system should be flushed and cleaned with MEK or
- 2. Xylene; brushes and rollers should be discarded.

SAFETY PRECUATIONS

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: proper ventilation, use of proper lamps, wearing of protective clothing and masks, tenting, and proper separation of application areas. This coating is flammable. Keep away from fire, or other sources of ignition. For more specific safety procedures, please refer to the RUST BASE SDS. KEEP OUT OF REACH OF CHILDREN.





Safety Data Sheet (02.02.22)

SECTION 1: Identification of the substance

- 1.1 PRODUCT IDENTIFIER: RUST BASE: GHS PRODUCT IDENTIFIER: Global Harmonized System #3208.90.0000
- 1.2 PRODUCT USE: Corrosion coating protection for steel and concrete surfaces
- 1.3 COATABLE LLC: 916 W. Burbank Blvd, Unit C-279, Burbank CA 91506
- **1.4 EMERGENCY TELEPHONE NUMBER:** 800-424-9300; 202/483-7616

SECTION 2: Hazard identification

2.1 Classification of the substance: This products is a flammable, solvent-based coating and should be treated according to all known safety precautions.

2.2 Label elements: Signal Word: WARNING

Hazard Symbol







Hazard Statement: Flammable liquid and vapor. Harmful in contact with skin. May cause cancer. Causes eye irritation. May cause respiratory irritation or damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways. May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

SECTION 3: Composition/information on ingredients

INGREDIENT COMPOSITIONS	%	CAS/PIN	TLV
Aromatic 100	8.3%	64742-95-6	50.00
Aromatic 150	20.0%	64742-94-5	25.00
Mineral spirits	8.12%	64742-47-8	100.00
4,4 Methylene Bis (Phenyl Iso) Diphenylmethane	0.64%	26447-40-5	Not established
4,4 MDI, Bis (4-isocyanatopheny methane) Polyiso	34.97%	Proprietary	Not established
4,4 Diphenylmethane Diiso	10.12%	101-68-8	.002-ceiling (.051 mg/m3)
Metallic paste	17.85%	7429-90-5	Not established

SECTION 4: First aid measures

4.1 Description of first aid measures

INHALATION: Remove to fresh air. Give oxygen if required. Seek medical help, if needed.

EYES: Flush w/water for at least 15 minutes; see physician.

SKIN: Remove contaminated clothing; wash affected areas w/mild soap & water.

INGESTION: Do not induce vomiting. Give 1-2 glasses milk or water. Seek medical attention according to amount of product ingested.





Safety Data Sheet (02.02.22)

SECTION 5: Firefighting measures

5.1 Extinguishing media: Foam, dry chemical, carbon dioxide; water fog to cool containers exposed to heat.

5.2 Special hazards arising from the substance or mixture:

Hazardous combustion products: Carbon monoxide, isocyanate-based fume Autoignition Temperature.: 214C. degrees Minimum ignitions energy: 6.1% Flash point: 44C. TCC Flammable limits: (Lower) 1.4% / (Upper) NAV% Sensitivity to static discharge? Yes Sensitivity to mechanical impact? Possible due to aluminum content Conditions of flammability: Spraying/activities that create fine mist

5.3 Advice for firefighters: Firefighters should wear full-body protection & SCBA

SECTION 6: Accidental Release Measures

- 6.1 Personal precautions: Use protective clothing; use non-sparking tools. Product may form flammable vapour-air mixture so take measures against build up of static discharge.
- 6.2 Methods of cleanup: Use kitty litter or similar absorbent to contain spill. Neutralize w/solution of 80% water/20% Tergitol TMN-10.

SECTION 7: Handling and Storage

- 7.1 Precautions for safe handling: Ground all containers; use non-sparking tools. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.
- 7.2 Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition. Keep away from children.

NAP = Not Applicable

NAV = Not Available

SECTION 8: Exposure Controls and Personal Protection

8.1 Control parameters: To be worn when spraying or within contained areas--Half-face respirator w/organic vapor filter, safety glasses w/shields, PVA or nitrile chemical-resistant gloves, skin protection; for all other applications, good judgement should be used.

ENGINEERING CONTROLS: To spray, mechanical exhaust ventilation is required.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

PHYSICAL STATE: Liquid SOLUBILITY IN WATER: Insoluble pH: NAP

APPEARANCE AND ODOR: Silver grey liquid, aromatic odor FREEZING POINT: NAP BOILING POINT: >150C. deg. SPECIFIC GRAVITY: 1.1 ODOR THRESHOLD: 0.4ppm COEFF. WATER/OIL: NAV EVAPORATION RATE: very slow% VOLATILES: 45

VAPOUR DENSITY (Air=1): NAV VAPOUR PRESSURE: 8mmHg@20C. deg. CORROSIVE: NO





Safety Data Sheet (02.02.22)

SECTION 10: Stability and Reactivity

10.1 Conditions of Reactivity: dry aluminum powder10.2 Conditions of Instability: Impact, heat and friction

10.3 Possibility of hazardous reactions: None known.

10.4 Conditions to avoid: None known.

10.5 Incompatible materials: Ammonium nitrate chorofluoro carbons, chlorinated solvents, zinc rich greater than or equal to 8.2 kilo of organic zinc per gallon, strong bases, peroxides, amines

10.6 Hazardous decomposition products: Hydrogen gas, reactive chlorides when wet. ABS tested non-toxic when burned.

SECTION 11: Toxicology Information

11.1 Information on toxicological effects:

Acute toxicity - oral: If swallowed: HARMFUL OR FATAL - Causes chemical burns of mouth and stomach; corrosive to gastrointestinal tract; Paleness and cyanosis of the face; Excessive fluid in the mouth and nose; Bloating of stomach and belching; Nausea and vomiting; Risk of chemical pneumonitis and pulmonary edema

Acute toxicity - inhalation: Vapors or mist can cause irritation. People with asthma or lung problems may be more affected; smokers.

Acute toxicity - dermal: May cause TEMPORARY skin discoloration and irritation. May cause severe eye damage. Health effects to over exposure to CONCENTRATE: Corrosive to mucus membranes, eyes and skin. The seriousness of the lesions and the prognosis of intoxication depend directly upon the concentration and duration of exposure.

SECTION 12: Ecological Information

12.1 Toxicity

Air: 3.17 lbs./gallon; 380 grams/liter VOC*

Water: Insoluble in water; reacts slowly w/water forming polyurea polymer and liberating CO2 gas

Soil: Lead- and chromate-free, not hazardous under RCRA 40CFR

SECTION 13: Disposal Consideration

13.1 Waste treatment methods: Dispose of as paint/aluminum waste according to local regulations.

SECTION 14: Transport Information

14.1 UN number: 1263

14.2 UN proper shipping name: Paint Related Material

14.3 Transport hazard class: Class 3

14.4 Packing Group: III

Product is considered hazardous material, to be handled according to IATA regulations

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance: No listed materials under Superfund Amendments & Reauthorization Act of 1988 (SARA) 302, 304, 311, 312. Meets European codes under Article 59(10) of the Reach regulation. California Proposition 65 Reproductive Toxins: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

SECTION 16: Other Information

*Product is compliant with many national and local VOC content regulations. However, because manufacturer is not familiar with all local VOC requirements, the user is responsible for understanding the local VOC rules and for verifying that the product selections meet the most current VOC requirements of the area in which the products are to be used.

PREPARED BY: Coatable, LLC DATE: 10/24/21