

Technical Data Sheet Rust Eliminator 32

December 2009

Page 1 of 3

Product Description

Hernon[®] Rust Eliminator 32 is a new revolutionary product for eliminating old rust and preventing new rust on steel parts. Rust is chemically transformed into an inert, non-corrosive coating.

Typical Applications

Rust Eliminator 32 is used on rusted steel when only a minimum surface preparation is practical. **Rust Eliminator 32** stops rust, coats surface, and acts as a primer for various covering paints on:

- Duct work, overhead cranes and booms
- Municipal and highway sign posts
- Conveyors, supports, guard rails, fences
- Power plants, heating and cooling plants
- Storage tanks, truck trailers
- Pipes, valves

Product Benefits

- Easy to use
- Non-flammable, low toxicity
- One component
- Works on damp, rusty metals
- Replaces conventional primers for most industrial finish paints

Typical Properties

Property	Value
Resin	Acrylic
Appearance	Milky White
Specific Gravity	1.23
Viscosity at 25°C, cP	225 to 500
Flash Point, °C	None - aqueous medium

Use And Application

Surface Preparation

Old Steel

Loose of "flaky" rust must be removed. Only conversion of firmly bonded rust will result in durable protection.. Oil, old paint, grease, mill scale, fingerprints and water soluble surfaces and chlorides must be removed to allow **Rust Eliminator 32** to react with the rust.

Loose rust, oil paint and mill scale should be removed preferably by power wirebrushing, followed by rinsing with water to remove powder and soluble. Manual wirebrushing, chipping, scraping and particularly rotopeening can also be used. Oil, grease, form oil and fingerprints should be removed before loose rust. Ideal surfaces will show light rust as well as bare metal surfaces.

Rust Conversion Time and Appearance

Two coats of **Rust Eliminator 32** are recommended. On lightly rusted steel (that has been wirebrushed), the first coat will start to develop a violet color within 60 seconds. This will become satin to flat black in appearance. The second coat should dry to a satin black appearance.

On heavily rusted steel (that has been wirebrushed), the first coat should develop a purple-black color within seconds. The second coat should dry to a black color with gloss varying from flat to satin. The second coat should be applied within 15-30 minutes of the first coat.

Directions For Use

1. Mix thoroughly before using.
2. Remove oil, dirt and grease from surface. Wire brush to remove flaky rust and loose scale. Sanding is not required.
3. Pour into clean container for easy application by brushing or apply directly to surface and brush out.
4. Gloves should be worn during this process.
5. Sponge or brush on liberally. An airless spray may be used.
6. A black coating will appear within 5 minutes. Uneven color indicates a need for additional coats for maximum protection. Recoat time is 15-30 minutes. Allow at least 24 hours to dry before painting.
7. Most finish paints will not require an additional primer. However, light color latex and metal filled paints require a solvent base primer on top of **Rust Eliminator 32** coating before finish application.
8. Rollers, brushes and other tools should be cleaned immediately with detergent and water. Flush spray equipment immediately after use with detergent and water. **Rust Eliminator 32** is difficult to remove when dry.

Hints And Precautions For Use

1. Surface preparation - remove cutting oil residues, chlorides, water soluble sulfates, paint, oil debonding paint, dirt, grease, oil and flaky rust.

2. If sandblasted, sufficient material should be applied to effectively cover the profile.
3. Application of 2 coats for 4 mils dry film thickness recommended for maximum durability.
4. Prolonged contact with water before fully cured may cause coating to turn white. After re-drying black appearance will return.

Application Conditions

Rust Eliminator 32 may be applied when surface and air temperature is between 50°F (10°C) minimum and rising and 90°F (32°) maximum and falling. Reaction is slower at lower temperatures. If temperature is too hot, film may surface dry and bubble. High humidity is beneficial; it slows drying but assists rust conversion.

Rust Eliminator 32 should not be applied in conditions of condensing humidity (e.g. dew, fog), on ice, in rain or in heavy sea (salt) spray atmospheres. Steel surfaces may be damp but not wet (i.e. continuous visible film of water). **Do not apply Rust Eliminator 32 to surfaces in direct sunlight.**

Application Equipment Methods

Rust Eliminator 32 may be applied by spray, roller or brush. Roller or brush is suitable for small areas. Avoid sags and ridges and keep wet by coating about a square yard at a time. Roll away from previously coated area then roll back. **Do not pour unused material back into the original container or dip brushes in original container. NEVER add solvents to Rust Eliminator 32.**

Spray application is recommended for larger areas. Airless spray equipment is faster, and provides more effective conversion due to improved surface penetration. Conventional air-spray equipment may be used but **Rust Eliminator 32** may require thinning up to 10% with water for proper spraying.

Resistance To Moisture Solvents & Chemicals

Rust Eliminator 32 should be topcoated for many applications. Continuous exposure of **Rust Eliminator 32** coating to water, solvents or chemicals can cause whitening, blistering or flaking of the latex film.

Rust Eliminator 32 should not be used in applications involving continuous immersion in water or fluids. **Rust Eliminator 32** should be topcoated with products known to be resistant to the environment expected. Latex topcoats are not recommended without a suitable barrier coat.

Topcoat selection is dependent upon the environment to which the coating will be subjected. The following guidelines can be used. Topcoats are listed by their relative order of performance.

- Moisture/salt spray—high-build epoxies, coal tar epoxies, catalyzed urethanes, vinyl's, chlorinated rubber.
- Solvent Resistance—catalyzed urethanes, high build epoxies, coal tar epoxies, vinyl's.
- Acid Resistance—catalyzed urethanes, vinyl's, coal tar epoxies, high build epoxies.
- Alkali Resistance—catalyzed urethanes, coal tar epoxies, high build epoxies, chlorinated rubber.
- Oxidizing Agent Resistance -- vinyl's, catalyzed urethanes.
- Abrasion -- epoxies, urethanes, alkyds.

Where cratering, pitting or heavy surface profile is evident, use two coats of **Rust Eliminator 32** followed by a high build primer or topcoat with sufficient mil thickness to prevent pin-point corrosion. **As with all paint systems, a test patch is recommended.** Any reputable painting contractor or coating representative can also assist you.

The following primers should not be applied directly over **Rust Eliminator 32**:

- Zinc dust (zinc rich primers).
- Copper powder (anti-fouling paints).

Industrial primers containing chromate are usually compatible but a test patch should be completed to insure performance.

Clean Up

When **Rust Eliminator 32** dries, it is extremely difficult to remove; therefore, spatters should be cleaned as they occur. Immediately after use, contaminated brushes, rollers, trays, etc., should be cleaned with cold tap water and detergent. Spray equipment should be flushed through immediately with mild detergent and water and rinsed with fresh water. Containers should be closed after every use to prevent skinning.

If **Rust Eliminator 32** is spilled on clothes, the garment should be soaked with cold tap water as soon as possible and **Rust Eliminator 32** washed out before it dries. **Do not use** ammonia, strong alkali detergents or hot water for clean up.

Hands and nails should be cleaned with soap and water using a nail brush. Black stains from iron-contaminated **Rust Eliminator 32** can be removed from the hands with a mixture of 1 volume of liquid household bleach and 4 volumes of tap water, followed by washing with soap and water. Spills of **Rust Remover 32** should be flushed with large amounts of water.

Removal

Once dried, strong solvents such as paint remover will be required to remove **Rust Eliminator 32** from equipment and clothes. Mechanical abrasion may be necessary.

General Information

Safety Data

Rust Eliminator 32 can be an eye irritant. It may cause skin irritation following prolonged exposure. It is toxic if ingested in significant quantities.

- Wear rubber gloves and protective glasses during use.
- In case of eye contact, immediately flush with plenty of low pressure water.
- In case of gross eye contact, consult a physician.
- In case of skin contact, flush with water before it dries.
- Remove and wash badly contaminated clothing.
- In case **Rust Eliminator 32** is swallowed, induce vomiting and call a doctor. There is no specific antidote -- treat symptomatically.
- **Rust Eliminator 32** does not present a significant vapor hazard but avoid breathing mist during spraying.
- **KEEP MATERIAL AWAY FROM CHILDREN.**

Storage

Rust Eliminator 32 should be stored in a cool, dry location in unopened containers at a temperature between 46°F to 82°F (8°C to 28°C) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused material, do not return any material to its original container.

Dispensing Equipment

Hernon[®] offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon**[®] **Sales** for additional information.

These suggestions and data are based on information we believe to be reliable and accurate, but no guarantee of their accuracy is made. HERNON MANUFACTURING, INC. shall not be liable for any damage, loss or injury, direct or consequential arising out of the use or the inability to use the product. In every case, we urge and recommend that purchasers, before using any product in full scale production, make their own tests to determine whether the product is of satisfactory quality and suitability for their operations, and the user assumes all risk and liability whatsoever, in connection therewith. Hernon's Quality Management System for the design and manufacture of high performance adhesives and sealants is registered to the ISO9001 Quality Standard.