



ISO CERT NO. 160067



ISO CERT NO. 190018

FALCHEM® RUST-CON

RUST CONVERTER

PRODUCT DESCRIPTION

Falchem® Rust-Con is a water-based rust converter combined with a non pigmented high quality latex metal primer. The converter segments turn rust into a barrier of black non rusting magnetite. The primer acts as a bonding agent for oil-based intermediate and finish coatings of epoxy, enamel, acrylic, polyurethane and moisture-cures urethane, and with water-based coatings not subject to tannin staining. Water-based coatings may require an oil based stain blocker as an intermediate application, **Falchem® Rust-Con** is non-flammable and non-corrosive.

Basic use

Falchem® Rust-Con is recommended for use on rusted or partially rusted steel surfaces as a rust converter or pain primer, and as an etch primer on aged tight paint of any color, and as a sealer on non ferrous metals such as some aluminum, copper and brass.

- Protects against future rusting
- Can be used on welds
- Eliminated need to mechanically blast to white metal in many instances
- Not recommended for outside hull underwater applications
- DO NOT THIN

Packaging

Falchem® Rust-Con is packaged in 5 liter and 25liter pails.

Coverage

The actual surface condition and thickness of rust will dictate the amount of **Falchem® Rust-Con** needed.

Cautions

Do not use in direct contact with food or portable water. Refer to **Falchem® Rust-Con** MSDS for more information.

Surface preparation

Remove all salt, loose rust, mill scale, dirt, grease, oil, old paint and other deposits. Apply solvent cleaner according to manufacturer's directions and rinse. A residue free surface is essential before coating application begins. The surface should be CLEAN, TIGHT RUST.

Notes

Do NOT use acetone or dishwashing detergent to clean rusted or steel surface. When black color appears, rust conversion has started. If gray areas appear apply more **Falchem® Rust-Con** while surface is tacky.

Application

Brush, roll or spray undiluted **Falchem® Rust-Con** in a heavy white coat with no surface show through at 8-10 mils wet film thickness. When black color appears, rust conversion has started. Wait at least 24 hours before top coating. A second coat of **Falchem® Rust-Con** may be applied while first coat is still tacky. Apply all top coats according to manufacturer's specifications. Use oil based marine or industrial coatings for best weather protection.

Application conditions

Keep from freezing, apply at 45°F and raising and below 100°F (7°-37°) and falling. Test over zinc based coatings as same galvanizing reject **Falchem® Rust-Con** chemistry. Do not apply onto zinc chromate or phosphates, lead magnesium, copper powder, graphite, borate pigments. Chromate-treated (pickled) fabricated steel building cold rolled perlins and gutters are to remain dry until top coated. Cold rolled steel require abrading to anchor profile and degrease.

Application method

Brush roll or spray undiluted **Falchem® Rust-Con** in a heavy white coat with no surface show through at 8-10 mils wet film thickness



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Limitations

Waterborne topcoats subject to tannin staining must be tested 48-60 hours before use. If tannin staining occurs, apply oil based stain blocker or apply oil based topcoat. Always prepare to test patch to ensure compatibility with substrate and follow-on coatings.

Dry time

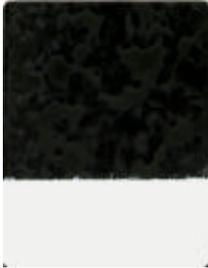
Dry time to re-coat

Wait at least 24 hours to top coat.

Visual Inspection

Correct Final Appearance: Purple black to black surface over rusted areas. Clear film over old paint.

White topcoat applied after 24 hour cure shows no bleeding.

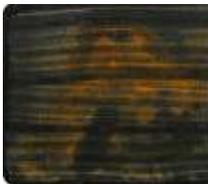


Insufficient Application: Gray color indicates need for more Falchem® Rust-Con to be applied while surface is still tacky.



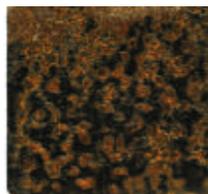
Improper Application: Brown streaks show incomplete conversion due to wet surface or thinned product.

Remove Falchem® Rust-Con, re-clean the area, and re-apply Falchem® Rust-Con.



Improper Surface Preparation: Speckled discoloration indicates mineral salts or other chemical contamination.

Remove Falchem® rust-con, re-clean the area, and re-apply Falchem® Rust-Con





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DON'T REMOVE RUST, CONVERT RUST!

CHOOSE FALCHEM RUST-CON

Not all rust converters perform equally. **Falchem® rust-con** was formulated specifically for use in marine industry – one of the harshest environments for coatings. There are considerable differences in formulas and performance between the various rust treatment products in the market. **Falchem®** has proven performance for years in harsh environments, which is not true for many competing rust converter type products.

COMPARING RUST CONVERTERS, RUST ENCAPSULATORS, OR ACID TREATMENTS.

It's important to remember that rust never sleeps!

Rust converters chemically treat rust – converting it into an inert compound – which then acts as a barrier layer against future rusting. Therefore when using a rust converter, especially **Falchem® rust-con**, you are adding a double layer of protection against future rusting before you even topcoat.

Rust encapsulators & inhibitors encase existing surface rust, cutting off the oxygen supply that keeps rust from growing. However, the existing rust is still there lurking under the encapsulating film, ready to continue growing upon any surface damage to the paint film or film failure.

Acids used for treating rust are nature corrosive, and any unreacted acid residue will remain on the surface. This residue frequently interferes with the proper bonding of topcoats and can cause accelerated chalking. Acids, such as phosphoric acid, do work well to remove rust stains from painted surfaces, but are not as effective as rust converters on a rusted surface.

FALCHEM® CONVERTS RUST

Falchem® rust-con is a water based rust converter combined with unpigmented high quality copolymer latex metal primer. The advantages of using **Falchem® rust-con** include labor cost by not having mechanically or chemically remove existing rust while at sea, on bridges, or in operational factories; and by environmental friendly properties of the product which makes delivery, storage, use, clean up and disposal relatively convenient when compared to other metal primers and rust removal methods.

FALCHEM® PROTECTS

Falchem® rust converter chemistry is a proprietary technology based on mild acids combined with an unpigmented, improved metal primer, copolymer created from styrene butadiene (latex) chemistry.

Falchem®rust-con is designed to apply directly to clean tight rust. The first bloom of rust after water blasting is a benefit.

The effects of **Falchem® rust-con** are created by its two principle components:

- Mild acids to arrest rusting and convert existing rust to other components
- A chemically advanced copolymer that bonds with both the converted rust and with applied topcoats.

Corrosion (rust) is simply metallurgy in reverse – meaning that it's nature's way of returning steel back to its original ore forms. The process of corrosion in the field (outside the laboratory) does not occur in a nice uniform growth, and the actual formation of rust is a very complex 5 step process. You can learn about rust and how it works at www.science.howstuffworks.com/question445.htm

Additionally all commercial steel contains impurities, which are not uniformly distributed in the metal. Understanding the chemistry of corrosion and effectively dealing with many of the irregularities that are present on a particular steel surface is what makes **Falchem® rust-con** better than other formulas.

FALCHEM RUST-CON IS PAINTABLE

Falchem® rust-con remains “open” to mechanical, chemical and electrical bonding with most topcoats. **Falchem®** is well known as a high quality and consistent product by those who routinely deal with the painting of rusted metals. **Falchem® rust-con** serves as a primer and bonds with oil based paint, epoxy, urethane and most other topcoats.