



RUST SHIELD™

TECHNICAL DATA SHEET



Check local VOC regulations to ensure compliance of all products in your area.

DESCRIPTION

Rust Shield is a 2.8 VOC, direct to metal coating to isolate and control oxidation, rust, and corrosion on metal substrates.

FEATURES

- Paint direct to rust or bare sanded steel
- Fast application
- Compliant everywhere
- Enhancer available for gloss adjustment
- Can be topcoated for UV resistance
- Restore agricultural, industrial, and heavy equipment

SUITABLE SUBSTRATES

- Ferrous metals
- Properly prepped, primed and painted surfaces

TYPICAL PROPERTIES

Part:	Product Name:	Color:	Container:
28061	Rust Shield	Gloss Black	Gallon
28064	Rust Shield	Gloss Black	Quart
28081	Rust Shield	Safety Orange	Gallon
28091	Rust Shield	Flat Black	Gallon
28101	Rust Shield	Black	Gallon
28104	Rust Shield	Black	Quart
28111	Rust Shield	White	Gallon
28131	Rust Shield	International Harvester Red	Gallon
28141	Rust Shield	CAT Yellow	Gallon
28151	Rust Shield	F.M.F. Gray	Gallon
28161	Rust Shield	John Deere Yellow	Gallon
28181	Rust Shield	John Deere Green	Gallon
28191	Rust Shield	Aluminum	Gallon
38008	Hardener and Gloss Enhancer	N/A	Pint

1000 hour salt spray test – ASTM-B117

No evidence of blistering or peeling at the scribe



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	Without 38008	With 38008
Flash Time @ 70°F (21°C) & 50% RH:	3-5 minutes	5-10 minutes
Dust Free Time:	5-10 minutes	10-15 minutes
Tack Free Time:	30 minutes	1 hour
Tape Time:	3 days	12 hours
Recoat Time:	48 hours	6 hours
Cure Time To Put Into Service:	24-48 hours	24-48 hours
Total Cure Time:	7 days	7 days
Recommended DFT:	3 mils	3 mils
Coverage per gallon:	250 square feet	250 square feet
Regulatory VOC:	335 g/L	324 g/L
Actual VOC:	265 g/L	247 g/L
Pot Life:	N/A	4-6 hours

Use VOC calculator to determine VOC of mixtures.

HANDLING AND APPLICATION



PREPARATION:

Degrease surface with **SEM Solve** or **XXX Universal Surface Cleaner**. Remove all loose paint and scale with a wire brush. Sand painted areas with 220 grit sandpaper. Wipe or blow off surface. Clean again with **SEM Solve** or **XXX Universal Surface Cleaner**.



MIXING:

Shake or stir thoroughly. **Rust Shield™** is ready to use. However, if thinning is desired, use a high quality urethane reducer up to 10% or use xylene. Check local regulations to see if reducing with xylene or reducer falls within allowable VOC limits.

Note: For optimal gloss and durability add 1 part **Rust Shield Hardener and Gloss Enhancer** to 8 parts of **Rust Shield**.

APPLICATION:

Do not use below 50°F (10°C) or above 90°F (32°C). Excessive heat will increase gloss. Do not place in direct sunlight or expose to excessive heat until dry.

Rust Shield may be applied to bare metal or sandblasted steel. **Rust Shield** should be used on ferrous metal only.

Note: **Rust Shield** is a top coat and should not be used as a tinted primer. **Rust Shield** will fade with extended UV exposure.



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SPRAY GUN

Air pressure: 35-45 psi with non-HVLP equipment
8-10 psi at the cap with HVLP



Fluid tip: 1.6 – 1.8

Coats: 2 – 3 medium wet



BRUSH OR ROLLER

Apply 3 medium wet coats. Maximum rust protection is achieved from thicker applications.



CLEANUP:

Use **XXX Universal Gun Cleaner** or appropriate cleaning materials compliant with VOC regulations in your area.



STORAGE:

Rust Shield products should be stored in a cool, dry place with adequate ventilation away from heat, sparks and flames. The shelf life for **Rust Shield** is 5 years when stored under normal conditions. The shelf life for **Rust Shield Hardener and Gloss Enhancer** is 3 years.

RELATED PRODUCTS:

Part:	Product Name:	Size:
38008	Hardener and Gloss Enhancer	Pint
38371	SEM Solve	Gallon
38373	SEM Solve	20 oz. Aerosol
38374	SEM Solve	Quart
77763	XXX Universal Gun Cleaner	20 oz. Aerosol
77771	XXX Universal Surface Cleaner	Gallon
77774	XXX Universal Surface Cleaner	Quart

Technical Consultation Service

Our Technical Staff is ready to assist you with any questions. You are invited to take advantage of our extensive experience, laboratory services and trained field service representatives. Call (800) 831-1122 for answers to your questions. Hours of operation are Monday through Thursday 8:00 am until 5:00 pm EST and on Friday 8:00 am until 4:30 pm EST.

Disclaimer:

The information supplied in this document is for guidance only and should not be construed as a warranty. All implied warranties are expressly disclaimed. All users of the materials are responsible for assuring that it is suitable for their needs, environment and use. All data subject to change as SEM deems appropriate.

Users should review the Safety Data Sheet (SDS) and product label for the material to determine possible health hazards, appropriate engineering controls and precautions to be observed in using the material. Copies of the SDS and product label are available upon request.