SUNBURST COATINGS

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PRODUCT DATA SHEET

SUN/STEEL #38 SERIES
W/R ALKYD METAL PRIMER

DESCRIPTION

Sun/Steel W/R Alkyd Primers are fast drying, water-reducible primers for general industrial. They are for use on steel either as a single shopcoat or as the primer for Sun/Steel W/R Alkyd Enamel Finishes. This primer has excellent corrosion resistance and early water resistance.

ADVANTAGES

- VOC 2.08 lb/gal (249 g/l) Coating
- VOC 0.87 lb/gal (105 g/l) Material
- Fast air drying
- Good early moisture resistance
- Excellent adhesion to untreated clean metal, both cold and hot rolled steel
- Reduces with water – means considerable cost savings in solvents
- Free of lead and chromate hazards
- No flash point – reduces fire hazards – lower insurance rates
- No critical recoat time when topcoated with Sun/Steel W/R Alkyd Enamel
- Lower odor improves working conditions
- Water can be used for cleanup of spray guns and other equipment
- Complete water system with Sun/Steel W/R Alkyd Enamel Finishes.
- May be topcoated with solvent-based alkyd enamels, epoxies, or urethanes. Testing is recommended if top coating with any finish other than Sunburst Coatings.

SURFACE PREPARATION

Substrate should be free of grease, oil, dirt, fingerprints, drawing compounds, any contamination, and surface passivation treatments to ensure optimum adhesion and coating performance properties.
New Galvanized Steel: Use recommended pre treatment.
Aged Galvanized Steel: Remove oxidation by cleaning.
Steel or Iron: The minimum surface preparation is hand tool or Power tool clean per SSPC-SP2 or SP3. Remove rust, mill scale, and oxidation products. For best results, treat the surfaces with a proprietary surface chemical treatment of zinc or iron phosphate to improve corrosion protection.
Testing: Due to the wide variety of substrates, surface preparation methods, application methods, and environments, the customer should test the complete system for adhesion and compatibility prior to full scale application.
Product Limitations:

- Package stability is 12 months. Indoor storage at 50-120ºF is recommended.
- Higher relative humidity will increase dry time.
- Do not spray at air temperatures below 50ºF.
- Topcoat with Sun/Steel or other water-reducible air drying alkyd enamels. May be top coated with other solvent based finishes after 24-48 hours air dry, with air temperatures above 75ºF.
- Heavier film thickness will give slower dry time and higher sheen. Follow recommended film thickness for optimum performance.

APPLICATION

APPLICATION TEMPERATURE:
Substrate temperature between 55 to 120°F.
Product temperature between 50 to 120°F.
Reduce with hot water in the winter, cool water in the summer.
Do not over reduce as sagging will occur.
APPLICATION EQUIPMENT
Water-reducible enamels must be applied at higher viscosities than solvent-based enamels. They apply and atomize easier at higher viscosities.
Conventional Spray:
Reducer: Water or IPA
Reduction: As needed, material thinned to 20-25 seconds Zahn #3.
Note: Use oil & water extractor in air line per manufactures instructions. Drain daily or more often as needed especially in area or period of high humidity.
Airless Spray:
Reducer: Water or IPA
Reduction: As needed, up to 10%
Pressure: 1800-2300 psi
Tip: .011” - .017”
Electrostatic Spray:
See Salesman, systems are now in testing
HVLP: (Mach I)
Air Pressure: 70-90 psi
Fluid Pressure: 3-10 psi
Fluid nozzle: #94 (.055”)
Reducer: Water or IPA
Reduction: As needed, up to 5%
Dip:
See Salesman for information.

CLEAN-UP
Use water when wet. If no longer water soluble then clean with Lacquer Thinner. Follow manufacturer’s safety recommendations when using any solvent.

STORAGE

WINTER:
PROTECT FROM FREEZING:
Store inside a building, preferably with heat to maintain a climate of no less than 50°F. If stored outside, protect with blanket material and store under canopy if possible.

SUMMER:
PROTECT FROM EXTREME HEAT:
Store inside a building or under canopy to prevent direct sunlight exposure. Extreme heat will destabilize the product by affecting the pH and resins. Extreme heat is 160°F or above.

CHARACTERISTICS

GLOSS: Flat, matte
COLOR: White (38W), Light Gray (38F1),
Dark Gray (38F2), Steel Gray (38F3), Red Oxide (38R)
Custom Colors tinted with ZERO VOC Colorants.

SOLIDS BY WEIGHT: 43 ± 2% (may vary by color)
SOLIDS BY VOLUME: 29 ± 2% (may vary by color)
VISCOSITY: 78-84 Krebs Units
RECOMMENDED FILM THICKNESS
Mils wet: 5.0 – 6.5
Applications, greater than 8 mils, paint will run.
Mils dry: 1.5 – 2.0

RECOMMENDED SPREADING RATE: (no application loss)
@ 1 mil dft: 580 sq ft/gal

DRYING SCHEDULE: 1.0 mils dft, 77ºF, 50% RH:
To touch: 30-45 minutes
To handle: 60-90 minutes
Tack free: 45-60 minutes
To recoat: 30-60 minutes
To pack: overnight
Force Dry: 15-30 minutes at 150-180ºF

NOTE: Good air movement and humidity control are necessary for proper drying of water reducible coatings. Coating millage and substrate temperature effect the above drying schedule.
Please contact your salesman if you are unsure how environmental conditions may affect your results.

FLASH POINT: None (Seta Flash)
pH: 8.5 – 9.5
PACKAGE LIFE: 1 year, unopened

VOC

COATING VOC: 2.08 #/gal or 249 g/l
This is an "artificial" VOC computation that the EPA and AQMD use to regulate paints and coatings that contain either water or exempt solvents. The *COATING VOC* is sometimes called the *Regulatory VOC*, and this is the VOC that air quality districts use to determine whether or not the paint is in compliance with the limits set by a rule.

MATERIAL VOC: 0.87 #/gal or 105 g/l
This is the *actual or real amount of VOC that a gallon of paint contains.* Always use the MATERIAL VOC to calculate actual VOC emissions.

APPROVALS

Sunburst 38 Series primers are approved to be used as a steel primer before coating by the following
ISOLATEX with 'CAFCO' 'SprayFilm' WB-3, WB-4, and
WB-5 Intumescent Fire Protection
CARBOLINE with THERMO-SORB VOC
CONTEGO with HS Intumescent RFB

PERFORMANCE CHARACTERISTICS

Test Method	Description:	Results:
ASTM D4541	Pull off Adhesion	1100 psi
ASTM B117	Salt Fog – 250 hours	PASS
ASTM D2243	Freeze/Thaw	20 Cycles

Meets performance requirements of:

SSPC Paint no. 23, MPI# 107

LEED Information

EQ Credit 4.2: Low-Emitting Materials: Paints & Coatings
1 Point

Intent: Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and wellbeing of installers and occupants.

Requirements: Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates: Do not exceed the VOC content limit of 250 g/l established in Green Seal Standard GC-03, anti-Corrosive Paints, Second Edition, January 7, 1997. VOC is computed by theoretical method ASTM D3960.

For more information, please visit this web site:
www.usgbc.org/leed.

FLAMMABILITY

This product is exempt under section 1501.2 of the 2009 International Fire Code.

Chapter 15 regulates spray finishing with any material defined as a flammable or combustible liquid by requiring that the spraying operation be confined to either a spray booth or an approved spray room. This section clarifies for the code user that liquids that do not have a fire point and a water-miscible liquids with a flash point over 95ºF (35ºC) having an aggregate water and inert solid content by weight of at least 80 percent are not regulated by Chapter 15.

CAUTIONS

Do not apply product to exposed steel if threat of rain is imminent.

Thoroughly review product label for safety and cautions prior to using this product. A Safety Data Sheet is available from the local Sunburst Coatings Distributor. Please direct any questions or comments to your local Sunburst Coatings Distributor.

Note: The information, rating, and opinions stated here pertain to the material currently offered and represent the results of tests believed to be reliable.

As of Date: 5/30/2025