

**PRODUCT CODE:** **ARMOR SHIELD AS8301KY (AS) FSC#16187 GRAY**

**END USE:** RUST INHIBITIVE COATING FOR USE AS A DTM OR OVER AS8411 RED OXIDE PRIMER ON STRUCTURAL STEEL, BRIDGES, DAMS, DAM GATES TRANSMISSION TOWERS AND TANK EXTERIORS.

**RESIN TYPE:** CALCIUM SULFONATE ALKYD (CSA), 4:1 RATIO SULFONATE TO ALKYD (MAXIMUM 25% ALKYD by Weight)

**SOLVENT TYPE:** ALIPHATIC HYDROCARBON

**VISCOSITY:** 85 - 115 KU @ 77°F (25°C)

**WEIGHT/GALLON:** 10.90 ± 0.5 lbs./gallon (1.308 kg/liter)

**WEIGHT % SOLIDS:** 76 ± 2.0 (31% CALCIUM SULFONATE by Weight)

**VOLUME % SOLIDS:** 59 ± 2.0

**SURFACE PREPARATION:** SSPC SP-1, SSPC SP-2, SSPC SP-3, SSPC SP-6, SSPC SP-7, SSPC SP-12 OR SSPC SP-14 (OR EQUIVALENT NACE STANDARDS).

**WET FILM:** 7 - 18 mils (175 – 450 microns). KYTC: 12 - 15 mils (300 – 375 microns)

**DRY FILM:** 4 - 10 mils (100 – 250 microns). KYTC: 7 - 9 mils (175 – 225 microns)

**FLASH POINT:** 105°F ( 40.5°C)

**GLOSS 60°:** LOW

**THINNER RATIO:** IF REQUIRED USE UP TO 10% MINERAL SPIRITS BY VOLUME.

**V.O.C.** 2.61 lbs./gallon (312 gms/liter).

**CHARACTERISTICS:** FIRM DRY PROPERTIES. HIGH SOLIDS AND EXCELLENT CORROSION RESISTANCE. CAN BE APPLIED OVER TIGHT RUST.

### PERFORMANCE CHARACTERISTICS:

**SYSTEM TESTED:** STEEL BLASTED TO SSPC-SP10, AS8301KY @ 8 mils (200 microns) DFT

**CYCLIC WEATHERING:** ASTM D5894, 4 CYCLES OR 5000 HOURS

RUSTING	ASTM D610	– RATING 10
BLISTERING	ASTM D714	– RATING 10
UNDERCUTTING	ASTM D1654	– RATING 10

**SALT FOG RESISTANCE:** ASTM B117, 5000 HOURS

RUSTING	ASTM D610	– RATING 10
BLISTERING	ASTM D714	– RATING 10
UNDERCUTTING	ASTM D1654	– RATING 10

**PENCIL HARDNESS:** ASTM D3363 5B

**FLEXIBILITY:** ASTM D522 PASES 180° BEND, 1/8" (3.2 mm) MANDREL

## APPLICATION INSTRUCTIONS

THE RECOMMENDED APPLICATION METHOD FOR ARMOR-SHIELD CSA PRODUCTS IS AS A SINGLE COAT SYSTEM APPLIED AT 7 – 18 mils (175 – 450 microns) WFT OR AS SPECIFIED BY DRY FILM REQUIREMENTS. WHEN USING A TWO-COAT APPLICATION METHOD (i.e. PRIMER/TOPCOAT), A MINIMUM OF 6 HOURS IS REQUIRED BETWEEN COATS.

**EQUIPMENT:** AIRLESS SPRAY – 30:1 GRACO BULLDOG WITH 3/8” (9.5 mm) I.D. HIGH PRESSURE LINE AND A GRACO SILVER GUN WITH A 0.017”-0.021” (0.43 – 0.53 mm) SPRAY TIP.

CONVENTIONAL SPRAY – USE A DV-MBC GUN OR EQUIVALENT WITH A “D” FLUID NOZZLE AND A 64 AIR CAP.

NOTE: BRUSH AND ROLLER APPLICATION CAN BE USED AS WELL AS OTHER SPRAY EQUIPMENT. CONTACT YOUR REPRESENTATIVE FOR RECOMMENDATIONS.

**SAG RESISTANCE:** 30 mils (750 microns) DFT

**COVERAGE:** 175-190 SQ. FT. PER GAL. @ 5 mils DFT (4.295 – 4.663 m<sup>2</sup>/l @ 125 microns DFT).

**THINNING:** UP TO 10% WITH MINERAL SPIRITS AS NECESSARY.

**MIXING:** MIX TO A UNIFORM CONSISTANCY BY HAND OR POWER MIXER.

**DRYING TIMES:** DUST FREE.....2 -6 hours\* @ 77°F (25°C), 5 mils (125 microns) DFT, 50% RH  
FIRM.....20 - 48 hours\* @ 77°F (25°C), 5 mils (125 microns) DFT, 50% RH  
RECOATABILITY....NO MAXIMUM

\* TIMES VARY DEPENDING UPON ENVIROMENTAL CONDITIONS, WIND, SUN EXPOSURE, ETC.

- MAY BE APPLIED TO SURFACES AND IN AMBIENT TEMPERATURES DOWN TO 0°F (-17.7°C) AS LONG AS NO VISIBLE CONDENSATION OR ICE IS PRESENT.
- THE MATERIAL TEMPERATURE, PRIOR TO BEING APPLIED, MUST BE ELEVATED TO ACHIEVE A WORKABLE VISCOSITY. THIS TEMPERATURE MAY BE HIGHER THAN THE MINIMUM RECOMMENDATION OF 35-45°F (1.6 – 7.2°C) BASED ON EQUIPMENT, DESIRED WORKING TIMES AND AMBIENT CONDITIONS.
- AMBIENT TEMPERATURES MUST REMAIN 3° DEGREES ABOVE THE DEW POINT DURING THE APPLICATION PROCESS.
- MATERIALS SHOULD NOT BE APPLIED WHEN THE RELATIVE HUMIDITY EXCEEDS 90%.
- MAY BE STORED AT TEMPERATURES DOWN TO 0°F (-17.7°C).

**CLEAN-UP:** CLEAN EQUIPMENT WITH MINERAL SPIRITS.

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