



TECHNICAL DATA

PDS No. 0809 MCU 2100 TYPE IV LOW VOC STAINLESS STEEL

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SELECTION DATA

GENERIC TYPE: Aromatic Moisture Cured Urethane.

PRODUCT DESCRIPTION: MCU 2100 Type IV is a single package, stainless steel filled urethane coating designed to afford superior abrasion and chemical resistant properties that out perform conventional epoxies and polyurethanes. Steelcote uses a high quality, 18/8/316-grade stainless steel flake that not only imparts coating toughness, but also enhances its chemical, heat and corrosion resistance. MCU 2100 Type IV exhibits excellent wetting properties that allows it to adhere tenaciously to power tool cleaned, rusted surfaces when dry abrasive blasting is not possible. Its quick dry, low temperature application properties, and overall chemical resistance make it a high quality, multi-functional maintenance coating. All raw materials in MCU 2100 Type IV have been found by the U.S.D.A. to be chemically acceptable for application to surfaces where there is a possibility of incidental food contact. MCU 2100 Type IV has been tested satisfactory under National Sanitary Foundation (N.S.F.) 12 for food contact. Passes 2500 hour ASTM B-117-73 Salt Fog Test.

RECOMMENDED FOR: As a finish coat for the protection of steel or galvanized metals in corrosive or highly abrasive environments. An excellent coating for structural steel, machinery, tank exteriors, weathered galvanized and wire-brushed rusted surfaces. Ideal for floor applications where superior abrasion resistance is needed. May be applied on concrete, wood, steel and non-ferrous metals. Excellent when used for secondary chemical containment areas and food contact on food processing equipment. See Engineering Service Bulletin No. UR-6B for chemical and solvent resistance data.

NOT RECOMMENDED FOR: Not generally recommended for Class I immersion services. Do not apply on wet or damp surfaces. If humidity is greater than 70%, add Steelcote Humidity Buffer per label instructions. For best adhesion, topcoat within twenty-four (24) hours. If a longer period of time is allowed, lightly sand the surface. Will darken when used outdoors.

PHYSICAL PROPERTIES

RESISTANCE TO:	Acids:	Good to Excellent
(Splash & Spillage)	Alkali:	Very Good
	Salts:	Excellent
	Solvent:	Excellent
	Water:	Excellent
VOLUME SOLIDS:		54% +/- 2%
WEIGHT SOLIDS:		69.1% +/- 2%
FLASH POINT:		106°F. (41°C.) TCC
POT LIFE:		Not Applicable
SHELF LIFE:		6 Months, Minimum
THINNER - REDUCTION:		20% maximum with Steelcote T-200
THINNER - CLEAN UP:		Steelcote T-200
APPLICATION TEMPERATURE:		28° - 90°F. (-2° - 32°C.)
SERVICE TEMPERATURE:		450°F. (233°C.), Maximum
GLOSS:		Flat
COLOR:		Dark Gray (See PDS 0821 for Bright Stainless Steel)
PACKAGING:		1 gal
WEIGHT PER GALLON:		10.84 lbs.(4.93 kg) ± 2%
V.O.C. (Volatile Organic Compound):		2.75#/gal (329 g/l)
AIM CATEGORY:		Industrial Maintenance Coating

COVERAGES

THEORETICAL COVERAGE:	866 square feet per gallon at 1 mil DFT (allow for application losses)
RECOMMENDED WET FILM THICKNESS:	3-4 mils per coat
RECOMMENDED DRY FILM THICKNESS:	2-3 mils per coat
TOTAL FILM THICKNESS REQUIRED:	6 mils DFT

DRYING TIME

	@ 77°F. (25°C.), 50% RH
TO TOUCH:	45 Minutes
TO RECOAT:	1 to 2 Hours
FINAL CURE:	7 Days

RECOMMENDED FINISH COATS

MCU 2100 Type IV is designed as a finish coat. MCU 2100 Type VIII should be used as a primer for intermediate coat visibility.

SURFACE PREPARATION

TO CONCRETE: Allow new concrete to cure a minimum of twenty-eight (28) days at 60°F. (15°C.) For proper bonding, apply over clean, dry, sound surface. Remove any existing oil, grease, wax, dirt, loose or foreign matter by washing with a solution of Steelcote 215 or Tri-Sodium Phosphate (TSP) and warm water. Flush with clean water and allow to dry thoroughly. Obtain tooth and remove any existing laitance on the concrete floors by dry abrasive blasting with 30/40 mesh aggregate or etching with Steelcote Clean & Etch per label instructions. If etching, neutralize with a solution of two-(2) cups aqua ammonia per five gallons of water. Flush clean with water and allow to dry thoroughly. Apply Steelcote MCU 2100 Type IV per label instructions. When more than one coat of MCU 2100 Type IV is to be applied, apply the second coat within twenty-four (24) hours. Surface may be primed with MCU 2100 Type I. Two coats are normally recommended. Clean all tools and equipment with Steelcote T-200 after use.

NOTE: If humidity is above 70%, add Steelcote Humidity Buffer per label instructions. Do not apply MCU 2100 Type IV over concrete containing release agents, curing compounds or hardeners without consulting Steelcote's Technical Service Department for details.

TO STEEL: Surface must be clean and free from oil, grease, moisture, loose and foreign matter. For best performance, dry abrasive blast to a Commercial finish in accordance with Steel Structures Painting Council SSPC-SP6 specification. Avoid blasting with coarse abrasives. Prior to blasting, remove any grease, oil, wax or contaminants by solvent wiping in accordance with SSPC-SP1 specification. After aggregate blasting, remove all aggregate, dust and grit by brushing or vacuuming and apply Steelcote MCU 2100 Type IV per label instructions as soon as possible after aggregate blasting and always before any flash rusting can occur. Power tool cleaning in accordance with SSPC-SP3 specification is acceptable for rusted steel where blasting is not possible. Apply Steelcote MCU 2100 Type IV per label instructions. When more than one coat of MCU 2100 Type IV is to be applied, apply the second coat within twenty-four (24) hours. Two coats are normally recommended. Clean all tools and equipment with Steelcote T-200 after use. If humidity is greater than 70%, add Steelcote Humidity Buffer per label instructions.

TO GALVANIZED STEEL: Surface must be clean, dry, sound and free from oil, wax, grease, loose and foreign matter. Degrease by solvent wiping in accordance with SSPC-SP1 specification. If white rust exists or galvanized surfaces are weathered, prepare by degreasing (SSPC-SP1) and hand or power tool cleaning in accordance with SSPC-SP2 or SSPC-SP3 specifications in order to remove any oxide or scale. Apply the Steelcote MCU 2100 Type IV per label instructions. When more than one coat of MCU 2100 Type IV is to be applied, apply the second coat within twenty-four (24) hours. Two coats are normally recommended. Clean all tools and equipment with Steelcote T-200 after use. If humidity is greater than 70%, add Steelcote Humidity Buffer per label instructions.

APPLICATION EQUIPMENT

Brush and roller application is not recommended except in very small areas where uniformity of color and texture is not required.

BRUSH: Use a clean, natural bristle brush. Reduce up to 15% with Steelcote T-200, only if necessary.*

ROLL: Use a short nap, mohair roller with a phenolic core. Reduce up to 15% with Steelcote T-200, only if necessary.*

CONVENTIONAL SPRAY

Gun:	Binks 18 or equal
Fluid Nozzle:	66
Air Nozzle:	66 SF or 66 PE
Air Hose ID:	1/4"
Material Hose ID:	3/8"
Needle:	65
Pressure:	Pot: 10 - 15 psi
	Atomization: 45 - 60 psi

Use moisture and oil traps.

Reduce up to 20% with Steelcote T-200, only if necessary.*

AIRLESS SPRAY

Pump Ratio:	30:1
Gun:	Graco 208-327 or equal
Tip Size:	0.013 - 0.015
Size:	6" - 8"
Pressure:	2500 - 3000 psi
Material Hose ID:	1/4"

Reduce up to 20% with Steelcote T-200, only if necessary.

***Do not thin to keep within acceptable V.O.C. requirements.**

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