



## SECTION SF 30 BLOCK 14 CONTINUATION PAGE

**The following items are applicable to this modification:****DATA SHEETS FOR UCRETE HF****UCRETE® HF****Polyurethane-concrete resurfacing system****Description**

Ucrete® HF is a three-component polyurethane-concrete flooring system. This troweled, monolithic flooring system is installed from 1/4 – 3/8" (6 – 9.5 mm) or greater. The thickness is determined by the service and cleaning temperatures and the severity of traffic expected. Ucrete® HF floors are extremely tough and have many physical properties that exceed those of typical concrete.

**Features Benefits**

- Thermal stability Resists steam or continuous hot-water cleaning
- Fast curing Minimizes down time
- Solvent free Low odor; VOC compliant
- No priming or sealing of substrate Single-lift application
- 30 years of project references Proven track record
- Can be applied to 7 – 10 day old Accelerates work schedules properly prepared concrete
- Extremely high bond strength Reduces shear at bond line
- Chemical resistant Tolerates organic and inorganic acids, alkalis and salts
- Unaffected by freeze/thaw cycles Handles wide temperature fluctuations
- Wide temperature in-service range from Exceeds that of typical epoxy overlays -50 – 235° F (-45 – 112° C)
- Excellent impact and abrasion resistance Handles heavy traffic
- Coefficient of thermal expansion Prevents shear at bond line similar to concrete
- Slip resistant Meets ADA recommendations
- Bottling facilities
- Pharmaceutical plants
- Commercial kitchens and restaurants
- Pulp and paper mills
- Chemical processing facilities
- Waste-water treatment facilities
- Freezers and coolers

**LOCATION**

- Interior or exterior applications

**SUBSTRATE**

- New and existing concrete surfaces and toppings; when applying over other surfaces, contact Technical Service

**Test Data**

**Compressive strength**, psi (MPa) 7,300 (50.3) ASTM C 579

**Tensile strength**, psi (MPa) 800 (5.5) ASTM C 307

**Coefficient of thermal expansion**, in/in/° F (cm/cm/° C) 1.1 x 10<sup>-5</sup> (2.0 x 10<sup>-5</sup>) ASTM C 531

**Density**, lb/ft<sup>3</sup> (g/cm<sup>3</sup>) 130 (2.80) ASTM C 905

**Resistance to fungi growth** Passes, rating of one ASTM G 21

**Impact resistance** No visible damage or ASTM D 2794 deterioration at minimum 160 in-lb

**Compressive modulus**, psi (MPa) 1.7 x 10<sup>5</sup> (1,170) ASTM C 469

**Flexural strength**, psi (MPa) 1,800 (12.4) ASTM C 580

**Modulus of elasticity**, psi (MPa) 1.7 x 10<sup>5</sup> (1,170) ASTM C 469

**Thermal conductivity**, 8 (1.2) ASTM C 177

BTU-in/in-ft<sup>2</sup> °F (W/mK)

**Water absorption**, % < 0.1 ASTM C 413

**Abrasion resistance**, g loss; 0.07 ASTM D 4060

CS-17 Wheel, 1,000 cycles

**Resistance to elevated** No flow or softening MIL-D-3134

**temperatures**

**Adhesion**, psi (MPa) 400 (2.8) ASTM D 4541 100% concrete failure

**Coefficient of friction**, Passes ADA ASTM D 2047 wet and dry recommendations

**Chemical Resistance** In accordance with ASTM D 1308, Ucrete® HF will resist exposure for up to 48 hours at 72° F (22° C) for the following chemicals.

- Dilute mineral acids including hydrochloric (< 35%), phosphoric (< 50%), and sulfuric (< 30%)
- Alkalis, including potassium hydroxide to a 50% concentration
- Some dilute organic acids such as acetic (30%) formic, citric, and uric
- Fats, oils, and sugars
- Mineral oils, diesel fuel, kerosene, and gasoline
- Most organic solvents, including aliphatic and aromatic hydrocarbons and alcohol

NOTE: Full chemical resistance is achieved after curing for 7 days. For chemical resistance to a specific compound, consult the Chemical

Resistance Guide. Contact your local representative for more information.

**Technical Data****Composition**

Ucrete® HF is a three-component polyurethane concrete.

**Compliances**

- USDA accepted for use in federally inspected meat and poultry plants in the USA
- Ministry of Agriculture, Canada, accepted for use in food establishments in Canada
- British Standard Specifications (BSS), for use in the U.K.
- Meets ADA recommendations for a slipresistant flooring surface

UCRETE® PRODUCT DATA