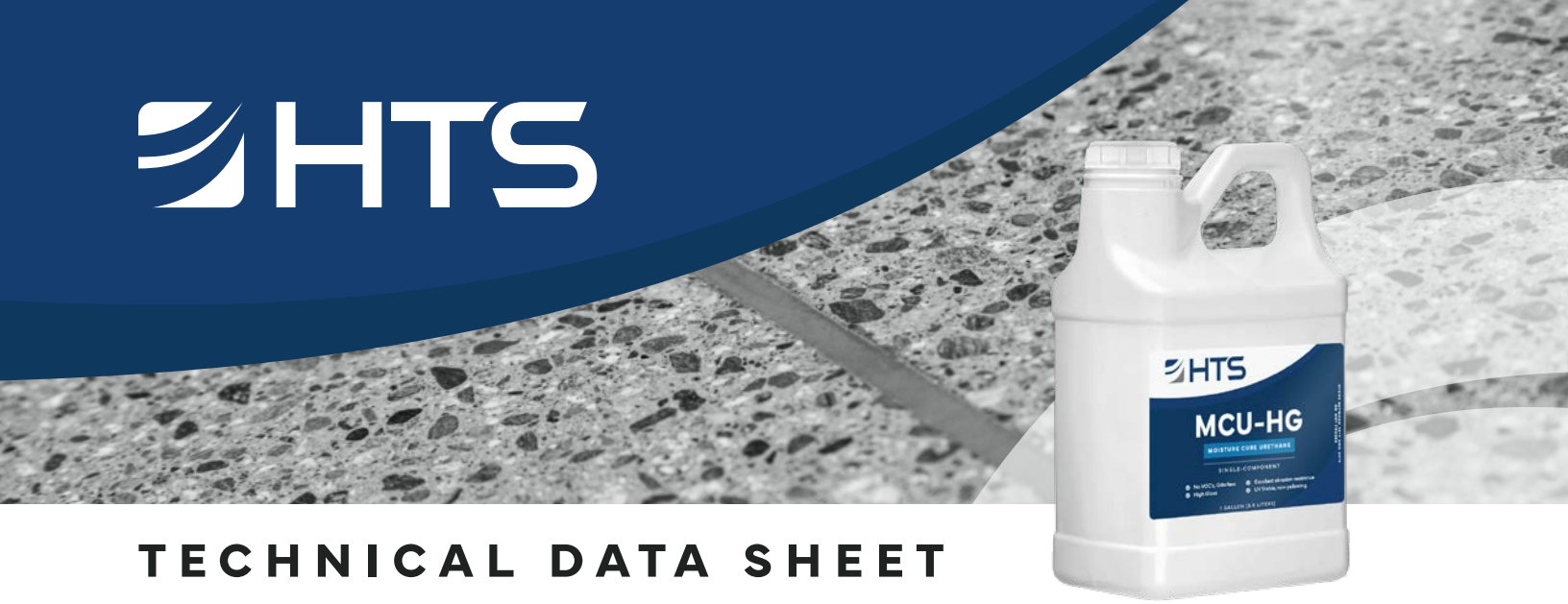

TECHNICAL DATA SHEET

MCU-HG

FLOOR COATINGS

MCU-HG is a one-component, moisture-cured, aliphatic polyurethane that forms a hard, high-gloss, wear-resistant, and flexible film. It is available as a clear or pigmented topcoat. A satin finish additive is also available for a medium gloss finish. MCU-HG is self-priming, odorless, contains no VOCs or HAPs, and is a UV light-stable polyurethane that won't chalk or yellow with sun exposure. It offers excellent chemical resistance against acids, bases, oils, and organic solvents, with higher wear resistance than polyaspartic, solvent-based urethanes, and epoxy coatings.

APPLICATIONS

MCU-HG is designed for industrial floor applications to be applied directly to concrete floors and walls, acid-stained concrete, epoxy primers or color coats, epoxy flake systems, or quartz.

- Breweries
- Distilleries
- Manufacturing
- Locker rooms and restrooms
- Warehouses
- Fire and Police stations
- Laboratories
- Outdoor Logos/Decorative Concrete
- Chemical Plants
- Aircraft Hangers
- Automotive Repair

ADVANTAGES

- Solvent-free, No VOC's or HAP's
- One-component, no measuring
- High gloss, odorless
- Aliphatic, UV stable, non-yellowing
- Great topcoat for concrete countertops coatings, stained floors, epoxy flake systems, and quartz
- Color packs and Matte finish available
- High chemical, mold, and fungus resistance
- Excellent abrasion resistance

PHYSICAL PROPERTIES

60 Degree Gloss (ASTM D-523)	95+
Pencil Hardness (ASTM D-3363)	4H+
Impact Resistance (ASTM D-2794) *Direct and Indirect	Passes 160 in lb
Taber Abrasion (ASTM D-4060-14) *CS17 Wheel, 1 Kg, 1000 cycles	9 mg loss
Tensile Strength (ASTM D-2370-98)	3427 psi
Elongation % (ASTM D-2370-98)	40%
Adhesion (ASTM D-4541)	490 psi
Coefficient of Friction (ASTM D-2047)	>0.6

Available in
1-gallon Kits

Shelf Life
1 year in original unopened container.

Storage Conditions
Recommended storage temperature is between 75°F to 85°F. Do not store below 55°F or above 85°F.

Consistency
Pourable, self-leveling liquid.

Pot Life
Approx. 40-45 minutes (at 72°F)

Appearance
Clear, Custom Color Matching Available

MCU-HG

FLOOR COATINGS

MATERIAL COVERAGE PER GALLON

Coverage rate will vary based on concrete porosity, finish and environmental conditions. Typical installations will yield:

Clear Coat and Matte Finish

Acid-stained or Prepped Concrete: 400-500 sq ft per gallon

Existing Coated Surface: 600-700 sq ft per gallon

Color Coat

Coated Surface and Prepped Concrete: 400-500 sq ft per gallon

Note: Do not apply at a Coverage Rate Below 400 sq ft per gallon. Excessive film thickness may cause foaming in final film.

SURFACE PREPARATION

Existing Coating

Thoroughly sand with 120-320 grit paper and clean to ensure a strong bond between coats. After sanding, vacuum thoroughly to remove any dust, dirt, or debris. Do not use water to clean a floor prior to application.

Acid-stained Concrete

Follow acid stain manufacturer procedure for cleaning and neutralization before applying MCU-HG topcoat.

Bare Concrete

Concrete must be mechanically ground or shot-blast to a profile resembling ICRI-CSP2-3. The concrete must be at least 28 days old and dry. For higher film build, a primer application using 100% solids epoxy is preferred before applying MCU-HG.

APPLICATION RECOMMENDATIONS

Ensure the surface is clean and thoroughly dried, as this product will react with residual moisture and may cause bubbles or foaming while curing. Apply at a 3-4mm thickness using a 3/16"–1/4" nap non-shedding knit roller. If using a squeegee, pull the material to a very thin film and back-roll using the specified roller. If using a squeegee, pull the material to a very thin film and back-roll using the specified roller. Do not leave puddles of material on the surface.

Avoid thicker applications, as they will trap bubbles in the film. Keep the container closed while in use. Coverage rates vary based on substrate, see "Coverage Rate". Using acetone or MEK, clean rollers and tools. Recoat time is 10-30 hours after initial coat.

If using a color pack or matte additive, use one 16 oz container per gallon of product. Add the pack to the material and mix at low-medium speed for 60 seconds or until uniform using a clean, dry mixing blade. Follow application instructions above. This product is sensitive to moisture. Keep containers closed as much as possible during application. Once a color pack or matte additive is introduced into the MCU-HG, the material must be used within the working time specification.

This product is best applied at a temperature range of 50ºF to 85ºF, with humidity at 20% to 60%. MCU-HG is sensitive to excess substrate moisture content. The substrate moisture vapor emission rate must not exceed 3 lbs./1000 sq.ft. over a 24 hour period as tested using the calcium chloride test, ASTM F1869. If using a moisture testing meter, the moisture reading must not exceed 1%. Maximum film thickness per application is 4 mils. Do not allow material to puddle.

CHEMICAL RESISTANCE

Test Procedure; ASTM D-1308 @72°F
R = Recommend
LE = Limited Exposure (remove within 2 hrs)
NR = Not Recommend

Chemical	Result	Chemical	Result
Acetone	R	Red Wine	R
Aniline	R	Vinegar	R
Anti-Freeze	R	10% H2O2	R
Brake Cleaner	R	Mustard	R
Brake Fluid	R	85% H3PO4	LE
Diesel Fuel	R	10% Nitric Acid	LE
gasoline	R	25% Acetic Acid	R
Hydraulic Fluid	R	25% HCl	R
IPA	R	Ketchup	R
Jet Fuel	R	Household Bleach	R
MEK	R	Urine	R
Motor Oil	R	25% Sulfuric Acid	R
Salt Water	R	Alcohol	R
Skydrol	R	Iodine	R
Xylene	R	Blood	R

LIMITATIONS

This product is sensitive to moisture, alcohols, and liquid epoxy materials. Contamination with alcohols such as isopropyl alcohol (IPA), benzyl alcohol will cause product failure, foam, and excessive heat while mixing and applying. Contamination with liquid epoxy materials will also cause excessive heat and product failure. Do not re-use previously opened containers. Once the container is opened, it is exposed to moisture in the air, and starts to react chemically. It is not recommended this product be transferred to another container before mixing.

FIRST AID

Remove contaminated clothing. If Inhaled: Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. If on the skin: Wash affected areas thoroughly with soap and water. If in the eyes: In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If swallowed: Rinse mouth and then drink plenty of water. Do not induce vomiting. Obtain medical attention.

WARRANTY

HTS warrants its products to be free of manufacturing defects will meet current published physical properties when applied in accordance with HTS directions and tested in accordance with ASTM and HTS standards. There are no other warranties by HTS of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. HTS shall not be liable for damages of any sort, including remote or consequential damages, resulting from any claimed breach of any warranty, whether expressed or implied, including any warranty of merchantability or fitness for a particular purpose or from any other cause whatsoever.

Created Date: 4/01/2024 • Revision Date: 06/18/2024