

# TECHNICAL DATA- GU-20

## HIGH PERFORMANCE (VOC COMPLIANT) POLYURETHANE

### DESCRIPTION

GlobMarble GU-20 is a commercial grade two-component polyester/aliphatic polyurethane coating that exhibits excellent characteristics for abrasion resistance, chemical resistance, flexibility, weathering, and UV stability. This product meets the VOC requirements for the newly enacted VOC laws of New York, Pennsylvania, New Jersey, and other states as an industrial maintenance coating. GlobMarble GU-20 designed as a non-yellowing solvent based clear coating for cement-based overlays, interior concrete, or as a top finish coat on epoxy systems.

GlobMarble GU-20 polyurethane recommended for concrete coating, laboratories, gyms, residential interiors, auto service centers, bars, clubs, retail stores cafeterias, and chemical exposure areas and more.

### SPECIFICATIONS:

#### RECOMMENDED FILM THICKNESS:

3-5 mils per coat wet thickness (yields 2-3 mils dry)

#### COVERAGE PER GALLON:

320 to 500 square feet (30m<sup>2</sup> to 47m<sup>2</sup>) @ 3-5 mils wet thickness

#### PACKAGING INFORMATION:

3 gallon and 15-gallon kits.

3- gallon kit = 2-gallons part A (weight varies by color) and 1-gallon part B (8.5#) (weights and volumes approximate)

#### MIX RATIO:

2-parts A to 1-part B by volume (approximate)

#### SHELF LIFE:

1 year in unopened containers

#### SOLIDS BY WEIGHT:

Mixed= 73% (colors); 64% (clear) (+/- 2%)

#### SOLIDS BY VOLUME:

Mixed= 70% (colors); 60% (clear) (+/- 2%)

#### VOLATILE ORGANIC CONTENT:

VOC content is less than 335 g/l (mixed)

#### STANDARD COLORS:

white, off white, light gray, medium gray, tile red, beige, and clear.

#### FINISH CHARACTERISTICS:

high-gloss (>70 at 60 degrees @ glossmeter)

#### IMPACT RESISTANCE:

Gardner Impact, direct & reverse=160 in lb (passed)

#### ABRASION RESISTANCE:

Taber abrasor CS-17 calibrase wheel with 1000 gram total load and 500 cycles= 22.0 mg loss

#### ADHESION:

350 psi @ elcometer (concrete failure, no delamination)

#### VISCOSITY:

Mixed= 200-600 cps (typical)

#### DOT CLASSIFICATIONS:

Part A "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

Part B "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

#### HARDNESS:

Shore D= 62

#### FLEXIBILITY:

No cracks on a 1/8" mandrel

#### CURE RATES: 70F (21C)

pot life – (1 1/2 gallon volume).....2-4 hours  
tack free (dry to touch).....3-5 hours  
recoat or topcoat.....5-9 hours  
light foot traffic.....14-24 hours  
full cure (heavy traffic)... ..3-5 days

#### APPLICATION TEMPERATURE:

45-90 degrees F. with relative humidity below 90%

#### CHEMICAL RESISTANCE:

REAGENT	RATING
acetic acid 5%	B
xylene	D
mek	A
methyl alcohol	B
gasoline	D
10% sodium hydroxide	E
50% sodium hydroxide	D
10% sulfuric	D
10% hydrochloric acid	C
20% nitric acid	B
ethylene glycol	D

Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.

#### PRIMER:

Recommend GE-10W clear, GE-C10W pigmented or 100 solids primer

#### TOPCOAT:

None recommended

#### LIMITATIONS:

GlobMarble GU-20 polyurethane colors or clarity for clear may be affected by high humidity, low temperatures, or chemical exposure. For best results use a high-quality phenolic core 3/8" nap roller. Slab on grade requires moisture barrier.

Substrate temperature must be 5°F above dew point.

All new concrete must be cured for at least 28 days.

Light or bright colors (white, safety yellow, etc.) may require multiple coats or a suitable color coordinated primer to achieve a satisfactory hide.

Colors may vary from batch to batch, therefore, same batch product recommend to use for an entire job.

Tire contact may cause discoloration or staining.

Physical properties are typical values and not specifications.

See reverse side for application instructions.

See reverse side for limitations of our liability and warranty.

## **MIXING AND APPLICATION INSTRUCTIONS (GU-20)** Solvent based polyurethane

1) **PRODUCT STORAGE:** Bring the material to normal room temperature before using. Store product at a temperature between 60- and 90-degrees F (16-32 C). Keep from freezing.

2) **SURFACE PREPARATION:** Prepare surface according to the type of complete system to be applied. All dirt, oil, dust, sealers, paint and other contaminants shall be removed to assure proper bonding to the substrate. Use mechanical scarification or acid etching until a desirable result is achieved. Diamond grinding or shot blasting recommended for a best result. A test should be made to determine that the concrete is dry; this can be done by placing a 4'X4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. The plastic sheet testing is also a good method to determine if any hydrostatic pressure problems exist that may later cause disbonding.

3) **PRODUCT MIXING:** GlobMarble solvent based polyurethane GU-20 has a two to one mix ratio by volume-merely mix two gallons of part A with 1-gallon part B. After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. Avoid whipping air into the coating. Improper mixing may result in product failure. Catalyzed product should be placed on the floor within 30 minutes. If left in the pail too long, product will cure at an accelerated rate rendering it useless.

4) **PRODUCT APPLICATION:** Mixed GU-20 polyurethane can be applied by brush or roller. Maintain temperatures within the recommended ranges during the application and curing process. Properly prime the substrate. It is best to maintain a wet edge to avoid roller marks. Direct sunlight or high temperatures may cause visible roller marking during application. Too thick of an application may result in product failure. Exposure to certain types of lighting such as sodium vapor lights may cause the product to discolor. Applications with relative humidity higher than 90% and/or poor air circulation may cause improper cure and surface tackiness.

5) **RECOAT OR TOPCOATING:** Multiple coats of this product are acceptable. If you opt to recoat this product, you must first be sure that all of the volatile components have evaporated from the coating during the curing process. Test the coating before recoating or top coating: press the coating with your thumb to test if the fingerprint impression is left on the surface. If no impression is left, then the recoating or top coating can be started. Inspect the coating to ensure no epoxy blushes were developed before recoating or top coating. Any blush must be removed before to recoating or top coating; use regular detergent cleaner to remove any blush. Colder temperatures require more cure time for the product before recoating or top coating. When recoating this product with subsequent coats of the urethane, it is advisable to apply the recoat before 24 hours passes. Also, it is advisable to degloss the previous coat to insure a trouble-free bond. If Top Coat has cured beyond 12 -24 hours or if dust or debris has settled into it as it cured, it must be screened with a rotational floor machine equipped with a 100-grit sanding screen. Follow screening with vacuuming. Follow vacuuming with a micro-fiber wipe with a solvent such as xylene, acetone, or denatured alcohol.

6) **CLEANUP:** Use ketone solvents

7) **FLOOR CLEANING:** Caution! Some cleaners may alter the color, and we strongly recommend testing each cleaner in a small area.

8) **RESTRICTIONS:** Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle. Dependent on actual complete system application, surface may be slippery, especially when wet or contaminated; keep surface clean and dry.

### **NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND OUR LIABILITY LIMITATIONS**

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