



Cardinal's 6G00 series is catalyzed with 6GHP at 250 g/l VOC is a aliphatic two-component polyurethane coating. This coating is suited for reglazing of porcelain or plastic. 6G00 series is formulated to meet strict air quality regulations, while maintaining the application and performance benefits of a conventional polyurethane coating.

TYPICAL USES:

- Intermediate coating for reglazing

BENEFITS:

- Low VOC – 2.08 lbs/gal
- Excellent chemical and solvent resistance
- RoHS / WEEE Compliant

CURED FILM PROPERTIES:

Testing conducted on 6G89-WHE18470 gloss white catalyzed with 6GHP at 2.0 mils DFT (Dry Film Thickness) over 20 gauge Bonderite 1000® test panels, cured 30 minutes at 180°F and air dried 14 days.

TEST	METHOD	PARAMETERS	RESULT
Hardness	ASTM D3363	Pencil	H - 2H
Abrasion	ASTM D4060	CS 17, 2 Kg, 1000 Cycles	Less than 100 mg
Adhesion	ASTM D3359	Cross-hatch tape	0% failure
Flexibility	ASTM D1737	1/8" mandrel	No cracking
Impact	ASTM D2794	Direct Reverse	50 Direct, 20 Reverse
Humidity	ASTM D2247	500 hrs	No effect
Solvent Resistance	ASTM D4752	MEK 100 rubs IPA 200 rubs	No effect No effect
Chemical & Stain Resistance	ASTM D1308 30 min. spot	A – IPA, hydrogen peroxide, cavicide, 409®, toluene, hydrochloric acid, textile spirits, amyl acetate, trichloroethylene, methanol, ethylene dichloride, lacquer thinner, xylene, ethanol, ammonia, tap water, Lanolin lotion, coffee, tea. B – Acetone, MEK. C – 50% sulfuric acid, 2.5N sodium hydroxide	A: No effect B: Slight dulling C: Moderate effect D: Discolored & softened

SURFACE PREPARATION AND PRIMING: The most important steps in a successful coating process are cleaning, pretreatment and priming. The following is a brief outline of some basics for unpainted substrates. It is not intended to be all-inclusive. For more information on your particular application contact Cardinal.

Cleaning the substrate: All surfaces to be coated, must be free of dirt, grease, oil, oxidation, mill scale, and all other contaminants. The surface must be thoroughly dry before painting. Air quality regulations have limited the allowable emissions from cleaning operations.

Plastic — All mold release should be completely removed. 6G00 is compatible with a variety of plastics, however, since there are numerous different formulations of plastic, a trial sample should be painted and checked before running production.

**THIS COATING MUST BE USED
ONLY IN A WELL VENTILATED
AREA!
KEEP THIS COATING AWAY
FROM ANY AND ALL SOURCES
OF IGNITION!**

TYPE: Polyurethane.

COMPONENTS: Two.

COLOR: Full range including Fed Std. 595b.

GLOSS: Semi gloss and flat.

COVERAGE: At 1.0 mil DFT, 65% transfer efficiency(TE)

Mixed paint, 2.08 lbs/gal : 410 ft²/gal.

Calculation: 1604 ft²/gal x % volume solids x TE ÷ DFT

VOC MIXED: 250 grams/liter = 2.08 lbs/gal minimum.

See mix ratio table below.

VOLUME SOLIDS:

6G00 base..... 46%

6GHP..... 90%

Mixed to 2.08 lbs/gal 39%

FLASH POINT: > 4 °F TCC

SHELF LIFE: 1 year from date of manufacture in factory sealed container.

APPLICATION: After preparing the surface, thoroughly mix component 1 before adding catalyst. Mix only the amount of material needed. The base to catalyst proportion must be measured accurately, by volume only, to obtain optimum film properties. Mix paint and catalyst thoroughly before adding HP-439 or Acetone for sprayability. Be aware of spray-able pot life. Brushing, rolling and dipping are not recommended.

MIX RATIOS: Two components must be mixed properly to obtain coating performance.

Parts are by volume	COLORS GLOSS
6G00 base	3
6GHP catalyst for 2.08 lb/gal	1
Acetone or SB-32	1

VISCOSITY: Will vary depending on color and gloss at a given VOC. At 2.08 lbs/gal, most colors will be in the 30"-40" #2 Zahn range.

SPRAY-able Pot Life: 2-3 hrs. at 2.08 lbs. VOC/gal

RECOMMENDED DFT: 1.5 – 2.5 mils (depending on color)

CURE: Air Dry
Tack free 2 hrs.
Dry to handle 24 hrs.
Dry hard 72 hrs.

(At 1.5 mils dry film thickness, 78° F, 50% RH)

* Some Air quality regulations require a maximum temp. of 194° F to qualify as an "air dry" system which generally have higher VOC limits than baking systems.

(Continued on page 2)

PRIMER SELECTION:

PRODUCT NO.	DESCRIPTION	FUNCTION
6G61-WHE12426	Polyurethane White Primer	Some surfacing

TROUBLE SHOOTING:

PROBLEM	CAUSE	REMEDY
Blisters, pin holes or solvent pop	In air line: Water contamination. Entrapped air. Entrapped solvent	Eliminate water – Check air lines. Use fresh catalyst. Use urethane grade thinners. Increase atomization, decrease film build.
Craters	Contaminated ambient air, e.g., silicone mist, dust.	Locate and eliminate source of contamination.
Fish-eyes	Substrate contamination.	Clean and prepare substrate.
Not drying	Alcohol in reducer. Wrong catalyst ratio.	Double check mix ratio.
Poor adhesion	Improper surface preparation.	See surface preparation section.
Gloss variation	Variation in application, cure schedule, catalyst ratio, humidity.	Consistent gloss depends upon consistent process.

APPLICATION EQUIPMENT: Most air quality regulations require the paint application transfer efficiency to be 65% or better. This generally means using electrostatic or high volume low pressure (HVLP) spray guns. Otherwise, conventional pressure feed, airless or air assisted airless spray equipment can be used. Air supply lines need acetone and oil traps.

EQUIPMENT CLEAN-UP: Acetone clean up should be done as soon as possible keeping in mind the pot life of the mixed paint. Avoid leaving catalyzed paint in the lines. Air quality regulations have limited the allowable emissions from cleaning operations.

PRODUCT LIMITATIONS:

- Catalyst reacts with water. Air supply should be dry. Containers should be kept tightly closed. Use urethane grade thinners only.
- Alcohols and glycols interfere with curing chemistry and should be avoided. They can be found in some lacquer thinners and certain synthetic reducers.
- Optimum film properties are dependent upon proper mixing of paint and catalyst.

SAFETY: Refer to the product's Material Safety Data Sheet (MSDS) for complete safety information. Contains organic solvents. Use with adequate ventilation. Do not breathe vapors or spray mists. If component TLVs are exceeded, a NIOSH approved air supplied respirator is advised. See MSDS for TLV information.

Contents are FLAMMABLE. Keep from heat, sparks or open flame.

Allergic reactions are possible. Avoid use by persons with respiratory problems.

Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

FIRST AID:

Eye contact: flush immediately with plenty of water for at least 15 min. and get medical attention.

Skin contact: wash thoroughly with soap and water for 5 minutes.

If swallowed, do not induce vomiting and get medical attention immediately.

PRODUCT IDENTIFICATION

6 G 0 3 – 2 7 8 7 5 (example)

