

Chemglaze A080 is a moisture-curing, aliphatic polyurethane coating designed for product finishing applications on metal and rigid or semi-rigid plastic substrates. Chemglaze A080 is an ASTM D-16 Type II oil-free product and is clear in color.

Features and Benefits

- **Versatile:** performs well in many metal and plastic product finishing applications. High gloss finish can be adjusted to semigloss or lusterless by adding Chemglaze A170 flattening concentrate.
- **Durable:** provides excellent resistance to impact and abrasion; exhibits low Taber weight loss values.
- **Environmental Resistance:** provides long-term weathering resistance properties.
- **Chemical Resistance:** cures to a hard surface that is resistant to many acids, alkaline detergents, lubricating oils, solvents, and chemicals.
- **Color Retention:** provides excellent colorfast, high gloss finish.

DIRECTIONS FOR USE

Surface Preparation

Thoroughly clean surfaces to remove all dust, oil, and grease. Before coating surfaces, apply test patches of Chemglaze A080 coating to determine if adhesion is adequate, or if scuff sanding or using a primer will be required. Contact your Socomore representative for an appropriate recommendation.

Mixing

Before mixing Chemglaze A080, scrape the container bottom with a clean stir stick to loosen and reincorporate settled pigments. Mechanically stir or agitate the coating until uniform in consistency. Proceed to the next steps for instructions on catalyzation, thinning, or gloss adjustment (if desired) of Chemglaze A080.

Catalyst

With adequate relative humidity, Chemglaze A080 will cure at room temperature without adding a catalyst. For faster tack-free time without affecting working life, add 1-2% Chemglaze 9986 catalyst when curing at room temperature. In low relative humidity conditions, or for faster cure at room temperature, add 1-5% Chemglaze 9995 co-reactant catalyst. Thoroughly mix the coating after the addition of a catalyst. The working life of Chemglaze A080 mixed with Chemglaze 9995 catalyst will be a maximum of 8 hours.

Thinner

Depending on the application method, Chemglaze 9951 thinner can be added to Chemglaze A080 to adjust the viscosity. Do not use solvents containing alcohol or glycol ether. Thoroughly mix the coating after addition of Chemglaze 9951.

Gloss Adjustment

Chemglaze A080 will dry to a high gloss finish without coating modification. The gloss can be adjusted to a semigloss or lusterless finish by adding Chemglaze A170 flattening concentrate. To adjust the gloss to semigloss, add 30-50% Chemglaze A170 concentrate by volume of Chemglaze A080 (not including thinner or catalyst volume). To adjust the gloss to lusterless, add equal parts by volume of Chemglaze A170 concentrate to Chemglaze A080.

The resulting gloss appearance is affected by application method, drying conditions, and the amount of Chemglaze A170 concentrate used. Do not exceed 100 parts Chemglaze A170 concentrate to 100 parts Chemglaze A080, as coating performance will be impaired.

When Chemglaze A170 concentrate is added to the high gloss coating, the flattening concentrate must be catalyzed for proper cure. Select the Chemglaze catalyst which will best match the curing conditions. Thoroughly stir Chemglaze A170 concentrate before use. Once added to Chemglaze A080, mechanically mix the material again. Failure to thoroughly mix will result in non-uniform gloss or film whitening.

Application

Apply coating by spray, brush, or roller application methods. Chemglaze A080 is best applied at temperatures between 13-35°C (55-95°F), with substrate temperatures at least 2.8°C (5°F) above the dew point.

Spraying

Apply coating by siphon, HVLP, pressure pot, or airless spray equipment. For application with siphon, HVLP, or pressure pot, dilute Chemglaze A080 5-25% by volume with Chemglaze 9951 thinner. For airless spray application, dilute up to 10% with Chemglaze 9951 thinner.

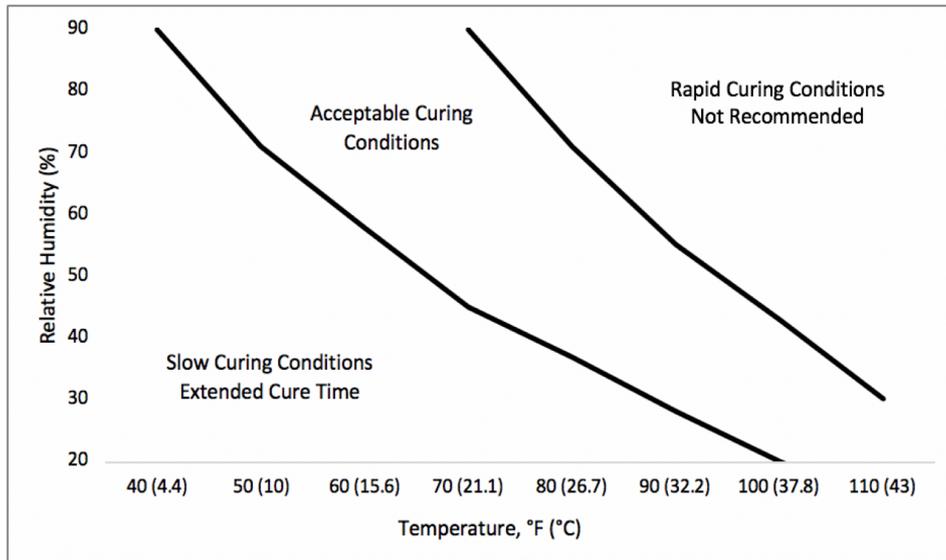
Brushing/Rolling

Thinning is typically not required for brush or roller application, but diluting up to 5% by volume with Chemglaze 9951 thinner may provide more optimal application properties.

Depending on surface characteristics, the optimum dry film thickness is 38.1-50.8 micron (1.5- 2.0 mil). Wet film thicknesses above 127 micron (5 mil) can cause bubbling and sagging.

Curing

Chemglaze A080 cures by reacting with moisture in the air. The cure rate is dependent on the temperature, relative humidity, and amount of air circulation needed to remove the solvent. Under the acceptable curing conditions, the coating will develop its ultimate properties in approximately 14 days. Lower temperatures and humidities will slow the cure rate, while higher temperatures and humidities will increase the cure rate. Higher temperatures and humidities may cause bubbling.



Chemglaze A080 may be recoated after the first application within 4 hours minimum and 24 hours maximum when cured at room temperature [25°C (77°F)] and 50% relative humidity. The recoat time is dependent on temperature and humidity. High temperatures and humidities promote fast cure while low temperatures and humidity slow down the cure. For maximum intercoat adhesion, recoat within 24 hours.

If the maximum recoat time is exceeded, the surface must be roughened by sanding with fine sandpaper before recoating.

Clean-Up

Use Chemglaze 9951 thinner, xylene, methyl ethyl ketone (MEK), or methyl isobutyl ketone (MIBK) to clean equipment immediately after application. Do not use lacquer thinners, water, or solvents containing alcohol.

TECHNICAL CHARACTERISTICS

Typical Properties*

Property	Value
Appearance	Clear Liquid
Viscosity, cps ASTM D 2196, Brookfield LVT, Spindle 2, 30 rpm	450-925
Density, kg/L (lb/gal) ASTM D 1475	0.99-1.02 (8.27-8.54)
Solids Content by Weight, % ASTM D 2369 modified	58.8-63.2
Flash Point (Seta), °C (°F) ASTM D 3278, Closed Cup	28 (83)
Volatile Organic Content (VOC), g/L (lb/gal) ASTM D 3960	407 (3.40)

*Data is typical and not to be used for specification purposes.

PRECAUTIONS FOR USE AND STORAGE

The shelf life is one year from date of shipment when stored at 10-32°C (50-90°F) in the original, unopened container. Store indoors away from heat, sparks, and open flames.

Before using this or any SOCOMORE product, refer to the Safety Data Sheet (SDS) and label for safe use and handling instructions.

For industrial/commercial use only. Must be applied by trained personnel only. Not to be used in household applications. Not for consumer use. Not for immersion service. Do not apply to wet or damp substrates. Spray only in properly ventilated areas with specified respiratory protection.

Manufactured for SOCOMORE by: LORD Corporation, Saegertown, PA

This technical data sheet replaces and cancels the previous one.

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