PRODUCT BULLETIN

June 2024

# STYPOL®

## 040-4954, 040-4960, 040-4965, 040-4966
## Marble Clear Gel Coats

## DESCRIPTION

STYPOL® Marble Clear Gel Coats are clear MACT compliant NPG isophthalic gel coats. They have been designed for use in the manufacturing of cultured marble, onyx, and granite.

## BENEFITS & FEATURES

- Low VOC / HAP content (42% or less)
- Excellent sprayability
- Excellent non-sagging properties
- High clarity
- Excellent chemical and water resistance
- Excellent thermal shock resistance (1)
- UV light stabilized
- Good color retention
- Suitable for low pressure spray equipment
- Meets gel coat test specifications according to ANSI Z124.3
- Meets BAAQMD, Regulation 8-50-1, Method 26 (Bay Area AQMD of Northern California)

(1) Note: It is important to remember that many factors other than resin influence the outcome of whether a cultured marble part will pass the Thermal Shock Test.

## PROPERTIES – LIQUID

| Property(1) | Unit | 040-4954 | 040-4960 | 040-4965 | 040-4966 |
|---|---|---|---|---|---|
| Acid Value | - | - | 17.5 | - | - |
| NVM | % | 59 | 69 | 59 | 58.5 |
| Viscosity | cps | 2,800(3) | 3,000(2) | 3,300(3) | 3,300(3) |
| Thix Index | - | 6.3(4) | - | 6.4(4) | 6.4(4) |
| Gel Time | minutes | 6.5(5) | - | 4.5(5) | 6.25(5) |
| SPI Gel Time | minutes | - | 4(6) | - | - |
| Gel to Peak | minutes | - | 5.75 | 9 | 9 |
| Peak Exotherm | °C/°F | - | 193/380 | - | - |

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer LV Spindle #3 at 30 RPM
3) Brookfield Viscometer RV Spindle #3 at 20 RPM
4) Brookfield Viscometer RV Spindle #3 at 2/20 RPM
5) 2.0% United Initiators Luperox® DDM-9
6) 1.0% United Initiators Luperox® DDM-9

## APPLICATION

Low VOC gel coats need to be at 75°F or higher for good sprayability. STYPOL® Marble Clear Gel Coats are designed for use with airless system gel coat applications. Suggested parameters are an 1840 or 518 tip, 500 to 700 psi fluid pressure, 15 to 20 psi assist air pressure, and 5-7 mils per pass. A large diameter fluid hose as well as an inline heater improves the pumping and sprayability of the material. Because of the lower monomer content, the fan pattern is smaller than with standard gel coats. Tip sizes larger than 18 do not atomize the gel coat correctly.

STYPOL® Marble Clear Gel Coats have also been sprayed through a FIT System using a 1727 tip, 350 to 500 psi of fluid pressure and catalyst air at 15 psi pressure. Use a 1/2-inch hose with a 3/8-inch whip.

Higher pump pressures may be needed with smaller diameter hoses (do not go below 3/8-inch hose) or with lower gel coat temperatures.

Determining castable time can be accomplished with a simple finger test. If a light drag of a finger over the gel coat film picks up gel coat, the gel coat is not yet ready. However, if the same light drag picks up NO gel coat, the matrix can be poured. Note that even when the gel coat is cured, it will be possible to pick up gel coat by applying direct pressure (as opposed to a light drag), and with such pressure, a slight fingerprint may appear on the cured gel coat film.

This product should not be used when temperature conditions are below 75°F, as curing may be adversely affected.

**CAUTION**
Do not add any material, other than the recommended methyl ethyl ketone peroxide, to this product without the advice of a Polynt Composites representative.

Refer to Polynt's Composites Applications Guide ("Cookbook") for equipment and application recommendations. Each user must determine the suitability of this product to his/her particular mode of operation and intended end-use application. A Polynt representative will be available to assist in the proper selection of all Polynt products available for commercial use.

## SHELF LIFE & STORAGE

The shelf life of fast cure (gel time less than 9.0 minutes) STYPOL® 040-4954, 040-4965, and 040-4966 is 60 days from the date of manufacture from Polynt. The shelf life of standard cure STYPOL® 040-4960 is 180 days from the date of manufacture from Polynt. To maximize usage life and maintain optimum properties, resins and gel coats should be stored in the original closed container at temperatures below 23°C/73°F and away from ignition sources and sunlight. Keep containers sealed to prevent moisture pick-up and monomer loss.

## SAFETY & WARRANTY

To receive a copy of our safety and warranty information, please email safetyandwarranty@polynt.com.