POLYCRYL CORPORATION
Earthguard Resins and Gel Coats

Data Sheet

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ZBC-2000-HF
EarthGuard Z-Thane Barrier Coat

Description:

EarthGuard ZBC-2000-HF is a high performance, high flex, urethane modified epoxy vinyl ester barrier coat. Z-Thane has been formulated as a blister guard & print blocker, providing a smooth gel coat surface. A number of properties & benefits have been realized due to the unique Z-Thane chemistry.

Features & Benefits:

- Reduced styrene (MACT compliant)
- Compatible with standard production gelcoat catalysts
- Easy application with standard gelcoat equipment
- Fast cure with minimal shrinkage
- Outstanding thermal shock resistance
- Superior blister barrier
- Excellent impact and shear resistance
- Outstanding surface profile achieved by blocking print and distortion

Typical Properties:

These values are listed as typical indicators only. Values may change with usage and storage conditions:

Viscosity:	
Brookfield LV #4 spindle @ 6rpm	15,000-20,000
Thixotropic Index (6/60)	5.5 - 7.5
Weight per Gallon	9.2
Gel Time @ 2.0% United Initiators 925H	6-8 minutes
Gel to Peak	5-7 minutes
Peak Exotherm	370-400°F
Styrene	32

Mechanical Properties of Resin Casting

TEST	**VALUE**	
Tensile Strength Psi/Mpa	9,730/67	ASTM D 638
Tensile Modulus Mpsi/Gpa	630/4.3	ASTM D 638
Elongation %	7	ASTM D 638
Flexural Strength Psi/Mpa	16,250/112	ASTM D 790
Flexural Modulus Mpsi/Gpa	610/4.2	ASTM D 790
Heat Distortion Temp C/F	120/248°	ASTM D 648
Barcol Hardness 934-1	30-35	ASTM D 2583

Application

1. Agitate slowly but thoroughly and bring temperature into the 70-80°F range.
2. Catalyze 2% with United Initiators 925H. No reduction or other additions are necessary.
3. Z-thane should be applied with air assisted airless equipment using a .021 to .023 size tip.
4. Barrier coat should be applied 25-35 mils wet after the Surface Gel Coat film has cured.
5. It is recommended that the first laminate be applied no earlier than 30 minutes and no later than 3 hours after the Z-Thane is applied.

Precautions

1. Do not under catalyze, use 2% only.
2. Catalyzed masses will get extremely hot and volatilize.

Plugs, pumps, spray guns and product containers should be properly grounded before use.

Supplemental

1. Reduction with HAPS or Acetone is not necessary or recommended. In addition to unnecessary adulterations, maximum HAPS may be exceeded.
2. Preferred initiator/catalysts are, United Initiators 925H or Akzo Nobel L50a. No equivalent.
3. Users should determine the equipment which best meets their overall needs. Tips of .021 to .023 with fan patterns of 40-50* are recommended.
4. Z-Thane should only be applied by air assisted airless equipment using catalyst injection, pump feed, atomized or non-atomized methods.

Stability-Shelf Life-Storage

These products are stable for 2 months if stored below 80°F and out of direct sunlight in original unopened containers.

Safety

1. This product contains styrene monomer. All precautions required for this material should be followed.
2. Refer to the appropriate MSDS and Data Sheets for these products.
3. Refer to product label precautions.
4. MEK Peroxide catalyst has its own hazards. The manufacturers MSDS/TDS should be consulted before use.