



TECHNICAL DATA SHEET

TSE-EcoSPRAY® GC100

Aliphatic Polyurethane Resin

Description

TSE-EcoSPRAY® GC100 is an “**Environmentally-Preferred Product**” or **EPP**. It is a Thixotropic Aliphatic polyurethane resin *free of Styrene, and is an “ultra-low” emitting resin during application.* **TSE-EcoSpray® GC100** is designed to be an in-mold coating for manufacturing gel coated articles that are to be reinforced using polyurethane. This polyurethane is aliphatic. Therefore products manufactured using **TSE-EcoSPRAY® GC100** exhibit excellent weather ability and good chemical resistance against weak acids and bases. Mold surfaces that **TSE-EcoSPRAY® GC100** should not be used on include any that contain styrene. It is recommended that the mold surface be manufactured using metal, epoxy, or polyurethane.

Features

- ☞ “Environmentally-Preferred Product”
- ☞ High degree of toughness
- ☞ Low to no resin shrinkage and
- ☞ Manufactured in ISO 9001 certified plants

Benefits

- “Ultra-low” emissions and free of Styrene, Eliminates Tile V Permitting related to processing with styrenated resins
- Improved lifecycle and impact quality
- Improved product quality and consistency
- Increased batch-to-batch consistency and quality

THE INFORMATION HEREIN IS BELIEVED TO BE CORRECT AND RELIABLE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA, AND NONE IS MADE AS TO THE MARKETABILITY OF THE MATERIAL OR ITS FITNESS FOR ANY PURPOSE. THE CONSUMER ACCEPTS THE RESPONSIBILITY OF AND THE CONDITIONS FOR LIABILITY OF USE OF THE PRODUCT.



TSE INDUSTRIES, INC., CLEARWATER, FL 33760, (727) 573-7676, www.tse-industries.com

Typical Liquid Properties (75°F)

TSE-EcoSPRAY® GC100

Viscosity, cps	5,000
Specific Gravity	1.33
Color	White
Shelf Life	6 months

TSE-EzNATE® GC100

Viscosity, cps	2,500
Specific Gravity	1.10
Color	Clear
Shelf Life	6 months

Note: The tack-free time when reacted at 1:1 by volume is typically varied from 10-15 minutes, based on the application.

Typical Mechanical Properties

	<u>Clear Casting</u>
Shore D Hardness	82-84
Heat Deflection Temperature °C	60
Flexural Strength, PSI	12,900
Flexural Modulus, PSI	468,000
Tensile Strength, PSI	7,500
Tensile Modulus, PSI	497,000

Processing and Application

Slight settling may occur upon standing. Agitation to ensure homogeneity is critical to maintain desired end performance. Processing from a suitable metered mix machine to achieve 1:1 by volume ratio with resin is recommended to maintain desired end performance. It is recommended that the gel coat be applied using FIT spray tip technology and applying the material at ≤2 pounds per minute to minimize porosity. A post cure at 135°F - 145°F for 10 minutes is necessary to ensure proper cure and strength of the gel coat before proceeding to reinforcing with TSE polyurethane and glass laminate (See TSE technical data sheets for the application of reinforcement Layer).

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Storage

Store both **TSE-EcoSPRAY® GC100** and **TSE-EzNATE® GC100** in tightly closed containers and protected from contamination from moisture and foreign substances, which can adversely affect processing. Any opened packages should be blanketed using dry gas and resealed tightly so as to keep moisture from entering the sealed container. **TSE-EzNATE® GC100** will react with water to form ureas and CO₂ gas, which may cause sealed containers to expand and rupture. For maximum storage life, sealed containers should be stored between 75°F and 95°F.

Standard Package

Components are supplied in 5-gallon pails (45-55 Lbs. net), 55-gallon drums (500-600 Lbs. net), and 275-gallon totes (2,500-3,000 Lbs. Net).

Safety and Handling

Refer to the Material Safety Data Sheet (MSDS) before handling either **TSE-EcoSPRAY® GC100** or **TSE-EzNATE® GC100**. It is the responsibility of the operator to completely read and understand the MSDS for each component before handling them. If for any reason you are not clear on the proper safety and handling procedures please contact your TSE representative for additional information.

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