



TECHNICAL DATA SHEET

TSE-EcoSPRAY® SS100

Aliphatic Polyurethane Resin

Description

TSE-EcoSPRAY® SS100 is an “**Environmentally-Preferred Product**” or **EPP**. It is an Aliphatic polyurethane resin *free of Styrene, and is an “ultra-low” emitting resin during application.* **TSE-EcoSPRAY® SS100** is designed for the manufacturing of solid surfaces. This polyurethane is aliphatic. Therefore, solid surface technology manufactured using **TSE-EcoSPRAY® SS100** exhibit excellent weather ability and good chemical resistance against weak acids and bases.

Features

- ☞ “Environmentally-Preferred Product”

- ☞ Clear in Color

- ☞ 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

- Easily pigment able and consistent batch-to-batch Coloring

- 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® SS100

Viscosity, cps	2,000
Specific Gravity	1.08
Color	Clear
Shelf Life	6 months

TSE-EzNATE® SS100

Viscosity, cps	1,000
Specific Gravity	1.09
Color	Clear
Shelf Life	6 months

Note: The gel time when reacted at 1:1.3 by weight is typically varied from 40-60 minutes, based on the application.

Typical Mechanical Properties

	Clear
	<u>Casting</u>
Barcol Hardness	45-48
Heat Deflection Temperature °C	58
Flexural Strength, PSI.....	12,700
Flexural Modulus, PSI	364,000
Tensile Strength, PSI	10,200
Tensile Modulus, PSI	387,000

Processing and Application

Slight settling may occur upon standing. Agitation to ensure homogeneity is critical to maintain desired end performance. Process using a weigh scale to achieve 1:1.3 by weight ratio with resin is recommended to maintain desired end performance. Components are to be added to a mixer and then fillers, pigments and processing aids may be added. Fillers and pigments must be dried before adding them to the mixer for blending into the isocyanate and polyol. Once all components have been added the mixer is to be sealed and the ingredients must be blended under full vacuum (minimum 28" Hg) for 15 minutes. The mixture is then ready for casting. After casting onto the molded surface, the material is then vibrated to liberate any entrained air trapped during pouring. A post cure at 125°F - 145°F for 2-4 hours is necessary to ensure proper cure and strength of the casting.

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Storage

Store both **TSE-EcoSPRAY® SS100** and **TSE-EzNATE® SS100** 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® SS100** 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 (40-50 Lbs. net), 55-gallon drums (40-450 Lbs. net), and 275-gallon totes (2,400-2,500 Lbs. Net).

Safety and Handling

Refer to the Material Safety Data Sheet (MSDS) before handling either **TSE-EcoSPRAY® SS100** or **TSE-EzNATE® SS100**. 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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