

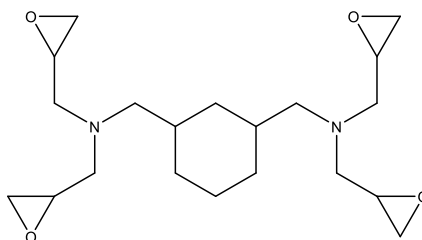
Technical Datasheet

SM-ER-602 Resin

Product Description

SM-ER-602 is a highly specialized epoxy resin specifically designed to function as premium crosslinking agents for acrylic systems. They drastically improve the thermal resistance, cohesive strength, and weatherability of pressure-sensitive adhesives (PSAs).

CAS NO. 65992-66-7



Applications

- Crosslinking agents for pressure-Sensitive Adhesives (PSAs)
- Crosslinkers for high-performance weather-resistant acrylic coatings..

Typical Physical Properties

Property	Value	Test Method
Appearance	Clear, pale yellow liquid	
Epoxy Value ,eq/100g	0.90 ~ 1.06	GB/T 1677-2008
Viscosity @ 25±1°C (mPa·s)	1,500 - 5,000	GB/T 2794-2013
Non-volatile Matter (%)	≥ 98.5	GB/T 2793-95

Physical Properties (Typical Composites)

Property	DDM	Test Method
Glass Transition Temp (T _g), °C	150	GB/T 194667.2-2004
Tensile Strength (MPa)	70	GB/T 2567-2008
Tensile Modulus (GPa)	3.7	
Flexural Strength (MPa)	75	
Flexural Modulus (GPa)	4.1	
Elongation at Break (%)	2.2	
Impact Strength (kJ/m ²)	3.8	-
Mixing Ratio (Resin:Hardener)	SM-ER-602:DDM=100:5.5	

Processing condition system: 170°C2h + 195°C2h + 210°C2h.*

Processing & Usage

- **Hardener Compatibility:** Can be cured using standard epoxy hardeners such as amines, anhydrides, and imidazoles, and coupling agents to formulate room-temperature or heat-cured adhesives, casting compounds, and compounding systems for high-temperature resistant applications. Recommended hardeners include 4,4'-Diaminodiphenyl sulfone (4,4-DDS), 4,4'-Diaminodiphenylmethane (DDM), Methyltetrahydrophthalic anhydride (METHPA), Methyl nadic anhydride (MNA), and 2-Ethyl-4-methylimidazole (2,4-EMI).
- low viscosity at room temperature and can be mixed directly and evenly with liquid curing agents. When mixed with solid curing agents, it can be heated to an appropriate temperature to improve compatibility.

Storage & Handling

- Due to high functionality and epoxy value, manage batch sizes to prevent violent exotherms.
- Avoid contact with strong acids, bases, and reactive chemicals; use proper personal protective equipment during handling.
- Store refrigerated below 5°C with a 6-month shelf life; materials exceeding this period may still be used if inspection confirms they meet quality standards.