Epoxy Resin 128 TDS

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Disclaimer: In view of the limitations of the additive function and the diversity of user requirements, please strictly test the applicability of the additive and the stability of the final product according to your own requirements before use. The above information is for reference only, and our company does not make legal guarantees or bear any legal responsibilities.

1. Product Basic Information

Item	Details
Product Name	Epoxy Resin
Product Model	128 (Also known as YD-128, E-51, 618)
Composition	Diglycidyl Ether of Bisphenol A (DGEBA), produced from bisphenol-A and epichlorohydrin
Appearance	Clear, colorless to light yellow liquid
Non-volatile Content	100%

2. Product Features and Uses

- It is a standard unmodified liquid epoxy resin with medium viscosity, high purity, low inorganic chlorine content, and low volumetric shrinkage during curing.
- Excellent processability: good fluidity, easy to mix, defoam, cast and coat; can be cured at room temperature or elevated temperature, compatible with various curing agents such as amines, anhydrides and polyamides, with a moderate pot life for convenient construction.
- Superior cured properties: excellent mechanical strength, adhesion, chemical resistance, heat resistance and electrical insulation; good dimensional stability, not easy to deform after curing.
- It is the most versatile and widely used bisphenol A type liquid epoxy resin, serving as a basic raw material in many fields.

3. Core Technical Parameters

Test Item	Technical Index (ASTM/Standard Test Method)
Epoxy Equivalent Weight	184–194 g/eq (ASTM D 1652-04)
Viscosity (@25℃)	11,000–14,000 cps (ASTM D 2196-05)
Hydrolysable Chlorine	Max. 0.05% (ASTM D 1726-03)
Color (Gardner)	Max. 0.5 g (ASTM D 1544-04)
Density (@25℃)	1.16 g/ml (ASTM D 1475-98)
Flash Point	252℃ (ASTM D 93)
Storage Period	At least 12 months (under proper storage conditions)

4. Application Scope

Widely used in various fields, including but not limited to: solvent-based, high-solids and solvent-free coatings (anti-corrosion coatings, marine coatings, industrial protective coatings, automotive primers, can & coil coatings, epoxy floor coatings); adhesives (structural adhesives, construction planting adhesives, concrete repair adhesives); electronic and electrical fields (electronic component potting, circuit board encapsulation, insulation casting); composites (FRP, carbon fiber/glass fiber reinforced products); civil engineering (structural reinforcement, waterproof plugging, bridge pavement); tooling, potting, casting and moulding compounds; and as a stabilizer in PVC.

5. Recommended Dosage & Usage

As a base material, the dosage is adjusted according to specific application scenarios and curing system requirements. It needs to be mixed with appropriate curing agents (polyamide resin, aromatic polyamine, aliphatic polyamine, anhydride compound, etc.) for curing; the mixing ratio can be adjusted according to curing conditions, and a small increase in curing agent dosage within a reasonable range is safe. It can be used with diluents and other additives to adjust the performance after curing. When used in transparent systems, its compatibility should be inspected in advance.

6. Precautions

- Epoxy Resin 128 is contained in sealed steel drums. Please confirm the packaging is intact before use. This product may become hazy or crystallize upon long storage, especially when exposed to low temperatures, which is a normal phenomenon. It can be restored to its original condition by warming to 55-60℃ while stirring. The maximum recommended temperature for handling or pumping is 80℃.
- This product should be stored in a dry, clean and well-ventilated warehouse, avoiding direct sunlight, high temperature and humidity, and kept away from heat sources and fire sources. The storage period is at least 12 months under proper storage conditions.
- It is low-toxic but irritating to skin and eyes. Avoid direct contact; if skin contact occurs, wash immediately with soap and water; if it gets into eyes, flush with plenty of water for 15 minutes and seek medical attention immediately. It is flammable before curing, so keep away from open flames.

7. Common Problems and Solutions

Common Problems	Solutions
Haziness or crystallization	Warm the product to 55-60℃ with stirring to restore it to a clear liquid state, which does not affect its performance.
Poor curing effect	Check the type and dosage of curing agent, ensure uniform mixing; adjust the curing temperature and time according to the application scenario.
Poor adhesion	Clean the substrate surface to remove oil, dust and other impurities; select a suitable curing agent and adjust the mixing ratio to improve adhesion.
Excessive viscosity affecting construction	Properly increase the temperature to reduce viscosity; add appropriate diluents (compatible with the system) to adjust the fluidity.