

CARADOL Polyether Polyols

Product Stewardship Summary

(CAS numbers: 9003-11-6; 9082-00-2; 25322-69-4;
25791-96-2; 52625-13-5)

[CARADOL polyether polyols grade ranges - Shell Chemicals](#)

What are CARADOL Polyether Polyols?

Polyether polyols are polymerised products produced by the catalysed addition of monomers of propylene oxide (PO) and/or ethylene oxide (EO) to an initiator and a starter. Typical starters are glycerine, mono-propylene glycol, sucrose, sorbitol, water or amines.

They are organic materials with two or more alcohol (hydroxyl) groups (OH) at the end of the polyether chains. Polyols of varying molecular weight, functionality, viscosity and reactivity can be produced. They are liquid under room temperature, sometimes with micrometer polymer particles present in suspension.

How are CARADOL Polyether Polyols Used?

CARADOL polyether polyols, when combined with di-isocyanates, are used in urethane applications, such as flexible foam, and in Coatings, Adhesives, Sealants & Elastomer (CASE) systems. As a result, we may encounter them in a wide variety of goods including furniture, car seating, bedding, paints and coatings, artificial sports tracks, playground surfaces, ski suits and other waterproof leisure wear.

CARADOL polyether polyols are also used in non-urethane applications such as surfactants and oil demulsifiers.

Health, Safety and Environmental Considerations

CARADOL polyols are not classified for physical hazards. They are not flammable, but will burn. They are not classified for health or environmental effects according to the Globally Harmonized System (GHS) criteria and can generally be considered as low hazard products.

Storing and Transporting Polyether Polyols

CARADOL polyols are transported by tank truck, rail car and vessel/hip both in bulk and non-bulk quantities. They are not classified as hazardous for transport under any transport regulations. CARADOL polyols are slightly hygroscopic and must be stored under conditions that prevent contamination with water or absorption of moisture.

Shelf-life has been tested to be 24 months, provided conditions for safe storage are adhered to. It is advised to test for oxidation products and water content prior to use. Storage temperatures should be managed so they do not fall below around 77°F/25°C, or to maintain product viscosity below 500 cSt. Where ambient temperatures are below the recommended handling temperature, storage tanks should be equipped with heating coils.

Contact with copper, copper alloys or zinc must be avoided.

Risk Characterization Summary

Risks associated with exposure to these products have been evaluated for the following “chain-of-commerce” activities: manufacture, storage, product transfer, transportation, and customers/markets. They are manufactured, stored and transported to customers in closed systems. Depending on the customer, end uses may vary from use as an intermediate for the manufacture of other chemicals, commercial products, or certain formulated consumer products. Proper equipment design and handling procedures maintain low risk from exposure where used as an intermediate. Exposures may be higher in commercial and consumer applications. To minimize risk, additional controls such as, special handling procedures and protective packaging are implemented.

This product stewardship summary is intended to give general information about the chemical or categories of chemicals addressed. It is not intended to provide an in-depth discussion of health and safety information. Additional information is available through the chemical's applicable [Safety Data Sheet](#), which should be consulted before use of the chemical. This product stewardship summary does not supplant or replace required regulatory and/or legal communication documents.



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