Dow Plastics

VORANOL CP 450

Polyol

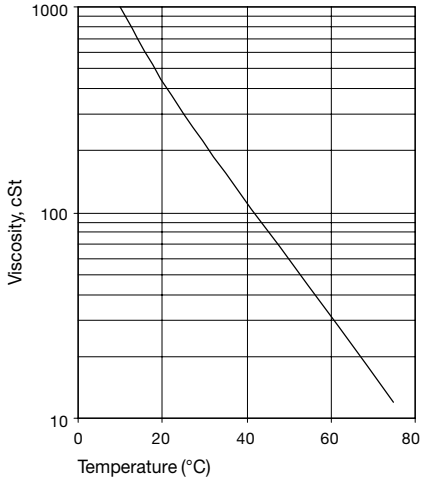
Description

VORANOL* CP 450 polyol is a glycerine propoxylated polyether triol with an average molecular weight of 450.

VORANOL CP 450 polyol, a low viscous polyol, is a special polyol used in polyol blends for rigid polyurethane foam applications also used in the manufacture of coatings, floorings, structural castings and adhesive.

VORANOL CP 450 can also be used in blends with other VORANOL polyols to influence physical and mechanical properties of semi rigid and rigid urethanes.

Viscosity vs. Temperature of VORANOL CP 450



Typical Properties	Units	Limits	Test Methods
Appearance / physical state		clear, viscous liquid	
Hydroxyl number	mg KOH/g	370-396	ASTM D4274-94d
Water, max.	%	0.060	ASTM E203-96
Acid number, max.	mg KOH/g	0.050	DOWM 100387-TE95A
Colour, max.	APHA	30	ASTM D4890-93
Specific gravity, 25/25°C		1.065	
pH (1 Water / 10 Methanol)		6.5-8.0	DOWM 101495-TE94A
pH (6 Water / 10 Isopropanol)	aim	7.5	AOD-AM-82-031
Viscosity, 25°C	cSt	300-360	ASTM D445-94
Average molecular weight		450	
Potassium & Sodium, max.	ppm	10.0	AOD-S
Flash point	°C	230	Pensky Martens closed cup
CAS # [1]		025791-96-2	

[1] Please consult your Dow representative for more detailed information regarding regulatory status.

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See "Handling and Storage" next page ☞

Safety Considerations

Safety Data Sheet [SDS] for VORANOL* CP 450 polyol is available from The Dow Chemical Company. SDS is provided to help customers satisfy their own handling, safety and disposal needs, and those that may be required by locally applicable health and safety regulations. SDS sheets are updated regularly. Therefore, please request and review the most current SDS before handling or using any product. Copies of the SDS are available on request through your nearest Dow Sales office.

Toxicity and First Aid
Most VORANOL polyols generally present no significant hazard in use when simple precautions are followed. However, some VORANOL polyols might present some hazards and before working with these products it is necessary to understand the hazards involved. See SDS for specific information. These polyols are commonly used in «urethane» systems that contain other more hazardous materials (e.g. isocyanates, amines). Anyone working with urethane systems must understand all the hazards involved in handling such systems and must establish and follow safe work procedures. Recommendations for handling, storage, and disposal of each formulation ingredients should be obtained from its supplier.

Skin and Eyes
When working with VORANOL polyols, avoid contact of polyol with eyes or skin. Safety glasses are suggested for use with most polyols. However, some VORANOL polyols require that chemical workers' goggles be worn. See the product specific SDS, Section 8. Skin contaminated with polyols should be washed with soap and plenty of water. If polyol contacts eyes, flush with plenty of low-pressure flowing water. If irritation occurs from contact with polyols, get prompt medical attention.

Ingestion
If a polyol is swallowed, give large amounts of water to dilute, but never give fluids or induce vomiting if patient is unconscious or is having convulsions. Obtain prompt medical attention.

Inhalation
VORANOL polyols when present alone do not present a significant problem from inhalation. If any ill effects should occur, get the affected person to fresh air and obtain prompt medical attention.

Fire and Explosion
VORANOL polyols are organic materials that will burn under the right conditions of heat and oxygen supply. Store and handle polyols away from open flame or high heat sources. Fires can be extinguished with water fog or other conventional means.

Fire fighters should wear positive pressure, self-contained breathing apparatus.
While polyols have no known explosion limits, if heated to decomposition in a confined area, they may generate sufficient volatile gases to be an explosion hazard. Polyols are stable under normal conditions. Materials to avoid are oxidising compounds. Hazardous polymerisation may occur with isocyanates.

Spills and Disposal
The preferred way of disposal is to incinerate under controlled conditions in accordance with all local and national environmental laws and regulations.

Customer Notice
Dow encourages its customers to review their applications of Dow products from the standpoint of human health and environmental quality. To help ensure that Dow products are not used in ways for which they were not intended or tested, Dow personnel are willing to assist in dealing with ecological and product safety considerations. Your Dow representative can arrange the proper contacts.

DOW®
Dow Plastics

We don't succeed unless you do.

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