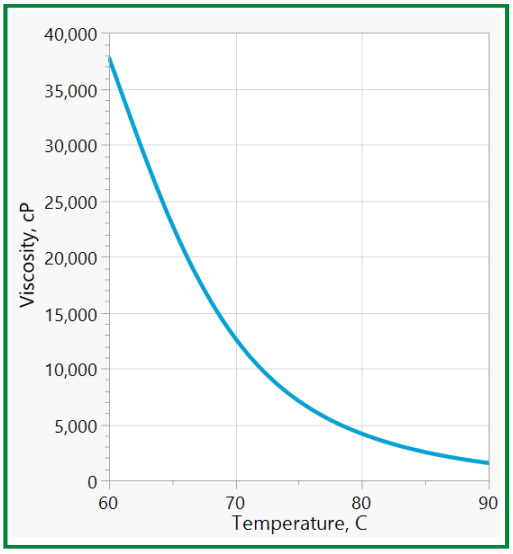
converge® Polyol CPX-2012-112

Typical Properties of CPX-2012-112

OH Number	mg KOH/g polyol	112
Acid Number	mg KOH/g polyol	< 0.5
Water Content	ppm	<500
Color	APHA	<100
Density	g/ml	1.2
CO_2 content	Weight %	40%

Description

Converge polyol CPX-2012-112 is an innovative, high performance polyol for a variety of polyurethane systems. It is an amorphous, hydroxyl terminated diol produced from propylene oxide and carbon dioxide. The molecular weight of CPX-2012-112 is 1,000 g/mol and it has a low polydispersity index of 1.1.



Features

CPX-2012-112 is used in the preparation of adhesives, coatings, sealants, elastomers and TPUs. Polyurethanes prepared using this polyol in the formulation have superior properties compared with 100% polyether or polyester polyols. In adhesive applications it provides improved green strength and adhesion to a variety of substrates. In coatings and elastomers, CPX-2012-112 can improve hydrolytic stability, UV resistance, mechanical strength and toughness.

Formulation and Application Notes

Converge polyol CPX-2012-112 has excellent compatibility with polyester polyols and low to moderate compatibility with polyether polyols, with curing recommended shortly after blending in polyether systems. It is compatible with isocyanates, chain extenders, surfactants and catalysts used in standard polyurethane systems. CPX-2012-112 is viscous at low temperatures and can be heated prior to using to reduce viscosity. It is recommended to warm up the polyol container at 80 °C for up to 24 hours prior to use.

Storage and Handling

Converge CPX-2012-112 absorbs water, which could alter its reactivity or the physical properties of final products. It is recommended that the product be consumed entirely after opening; if the product is not entirely consumed, purge headspace dry nitrogen before sealing in a tightly closed container. To reduse product viscosity for dispensing, drums may be warmed via hot box or full-coverage jacket heater (belt-style heaters are not recommended). CPX-2012-112 can be safely heated to a maximum temperature of 75C for a duration no longer than three days. Exceeding these recommendations may compromise product quality. Containers should be stored between 20 – 35 °C in a dry environment.

Other Information

Patent protected under US 8,247,520 and CN 102149746B. Other patents pending.

Regulatory

TSCA exempt under EPA Polymer Exemption in the USA. It is covered under under existing REACH monomer registrations in the European Union. Product is registered in Taiwan. Product registratoin is pending for Japan, Korea, and China.

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Version 2.0

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