

# CO<sub>2</sub>nverge<sup>®</sup> Polyol CPX-2501-56

## Typical Properties of CPX-2501-56\*

OH Number	mg KOH/g polyol	56
Acid Number	mg KOH/g polyol	< 0.1
Water Content	ppm	1000 max
Color		Yellow to amber
Density	g/mL	1.13
CO <sub>2</sub> content	Weight %	20%

\* these properties are typical values and are not to be considered product specifications.

### Description

Converge polyol CPX-2501-56 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-2501-56 is 2,000 g/mol and it has a low polydispersity index of 1.1.

### Features

CPX-2501-56 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-2501-56 can improve hydrolytic stability, mechanical strength and toughness.

### Formulation and Application Notes

Converge polyol CPX-2501-56 has excellent compatibility with both polyester and polyether polyols. It is compatible with isocyanates, chain extenders, surfactants and catalysts used in standard polyurethane systems. CPX-2501-56 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 60 °C for up to 24 hours prior to use.

### Storage and Handling

Converge CPX-2501-56 absorbs water, which could alter its reactivity or the physical properties of final products. Any unused portion of product should be stored by flushing the container with nitrogen or another inert gas prior to sealing in a tightly closed container. To maximize the product shelf life, minimize the number of times the container is opened and closed. For development work, it is recommended to repackage a large container in to smaller containers. 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; will be covered under existing REACH monomer registrations.

