

# CO<sub>2</sub>nverge<sup>®</sup> Polyol CPX-2003-70

## Description

Converge CPX-2003-70 is a 1800 molecular weight blend optimized for viscosity and hydroxyl number. Carbon dioxide accounts for approximately 30% of the polyol mass.

## Applications

Converge CPX-2003-70 is an optimized blend primarily for use in Hot Melt Adhesive formulations. It may also have benefits in coatings, elastomers, and other applications where low viscosity and flowability are important.

## Features

The aliphatic polycarbonate backbone delivers unique high performance to polyurethanes in terms of both strength and environmental resistance. In adhesive applications, it provides improved adhesive and cohesive strength and hydrolytic stability when used with many substrates including wood, aluminum, polycarbonate, and PVC. In coatings, it delivers UV resistance and high hardness. Converge CPX-2003-70 can also improve abrasion resistance.

## Formulation and Compatibility

Converge CPX-2003-70 can be utilized in Hot Melt Adhesive formulations. Increased temperature (60-80°C) is recommended to reduce viscosity and aid mixing. It has excellent compatibility with polyester polyols and isocyanates. Compatibility with polyether polyols is low to moderate; it is recommended that ether-based systems are cured shortly after polyol blending. Converge CPX-2003-70 is compatible with standard chain extenders, surfactants, and catalysts. Degradation in the presence of high levels of tertiary amine catalysts may occur; it is recommended that such systems are consumed the same day they are prepared. Exposure to temperatures >120°C is not recommended. Avoid long term storage at elevated temperatures (>65°C) as well as repeated thermal cycling.

## Regulatory

TSCA exempt under EPA polymer exemption, components are REACH registered or pre-registered as appropriate.

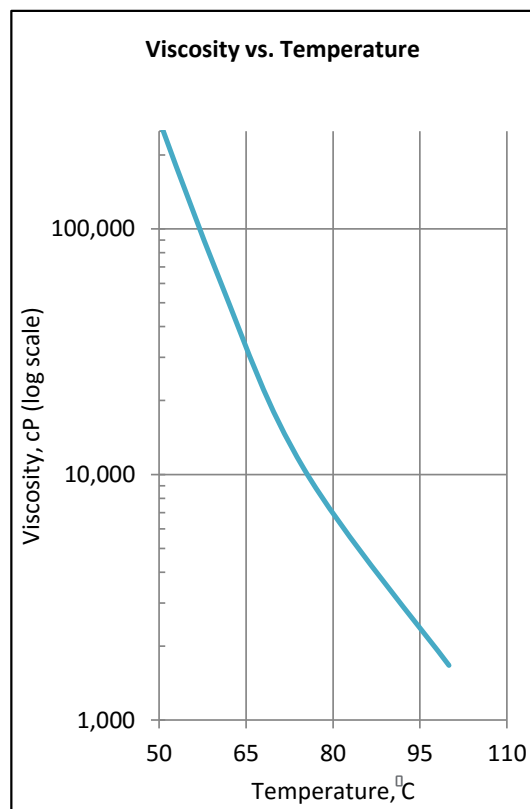
## Packaging

Available in drums. Contact an Aramco Performance Materials representative for other sample sizes.

## Typical Properties\*

Functionality	2.0
Molecular Weight (g/mol)	1,800
Polydispersity Index	1.1
OH Number (mg KOH/g)	67
Density (g/mL)	1.2
Viscosity (cP at 75°C)	10,500
Acid Number (mg KOH/g)	< 0.5
Water Content (ppm)	< 500
Color	Yellow to amber

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



Patent protected under US8,247,520 and CN102149746B, other patents pending