

# Prepolymer

## **MPA-053**

MPA-053 is polyether based MDI prepolymer. When cured with 1,4 butane diol, it makes elastomer product of 80A Shore Durometer hardness. The functionality of MDI content is very close to 2.0 and extending polyol is diol. Thus MPA-053 can make a very linear polymer when cured with 1,4 butanediol or other di-functional extender. The polyol content in MPA-053 is non-polar polyether polyol, and it can make hydrophobic urethane compounds. Due to the low functionality, addition of higher functionality prepolymer or isocyanate may be needed to increase the curing rate when this is used in a moisture cured system.

### **Typical Property of MPA-053 Prepolymer:**

Specific Gravity 1.073

Viscosity at 77 °F 9000 cps

% NCO 8.0 %

Amine Equivalents 525

Appearance at 77 PF Viscous Clear Liquid

#### Physical Property Data When cured with 1,4 butane diol:

#### Lab Test Results on Physical Properties

Tensile 1818 psi Elongation 813%

Hardness Durometer 75 – 80 A

Tear (Die-C) 427 pli Split Tear 152 pli

Natural Color Off-white opaque (can be pigmented)

# Health and Safety Information

We prepare Safety Data Sheets and Product Labels that provide health and safety information intended to aid in the safe use of this prepolymer. Before using or handling this product each person must read and become familiar with the safety/handling information as well as processing information. For more information, contact your Northstar Polymers representative or call our corporate headquarters in Minneapolis MN.

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