



Formulated Systems

PRODUCT INFORMATION

TECHNICAL DATASHEET

7/26/2010

HYPERLAST TMH 85A

Introduction

HYPERLAST™ TMH 85A is an unpigmented polyether based curative which reacts at a 1/1 volume ratio with HYPERLAST 100 Prepolymer isocyanate to produce a sprayable polyurethane that cures to a tough elastomer with high abrasion and hydrolysis resistance.

Component Properties

Polyol Component

Product Reference	HYPERLAST TMH 85A Polyol
Appearance	Pale Straw Liquid at 40 °C White Solid at 25 °C
Viscosity	400 - 1000 cps at 40 °C
Specific Gravity	0.98 - 1.0 at 40 °C

Isocyanate Component

Product Reference	HYPERLAST 100 Prepolymer
Appearance	Pale Straw Liquid at 25 °C
Viscosity	500 - 1000 cps at 40 °C
Specific Gravity	1.1 - 1.14 at 40 °C

Mixed System

Mixing Ratio	0.89 :1 by weight (Polyol : Isocyanate)
Gel Time	20" - 40" (100 gms at 40 °C)

Cured System – Typical Properties

Property	Test Method	Value	Unit
Shore Hardness	BS EN ISO 868	85	°A
Tensile Strength	BS4370	16	MPa
Elongation at Break	BS 903 Pt A2	380	%
Angle Tear Strength	BS 903 Pt A3	70	N/mm
DIN Abrasion	DIN 53516	55	mm ³ loss
Density	BS 903 Pt A1	1000	Kg/m ³

®™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

Processing Details

The following information is given as a guide to processing this product. It is recommended that optimum conditions for a specific application are determined experimentally. Our Technical Service Department can offer more detailed advice.

Recommended Processing Temperatures

Polyol Component 40 - 60 °C
Isocyanate Component 40 - 60 °C

Recommended Cure Cycle

Cures at ambient temperature - 24 hours minimum.

Storage and Handling

		Shelf life
Polyol Component	Store in tightly sealed containers at a temperature of 0 - 30 °C. Raise to the processing temperature and mix well before use. Avoid contact with moisture.	6 months
Isocyanate Component	Store in tightly sealed containers at a temperature of 15 - 30 °C. Avoid contact with moisture. Storage below the recommended minimum temperature may result in freezing of the Isocyanate. If the Isocyanate does not fully melt out when raised to the processing temperature it may be necessary to re-melt at a temperature of 60 - 70 °C following the procedures laid down in the information sheet 'ISOCYANATES - HAZARDS AND SAFE HANDLING PROCEDURES'.	6 months

More detailed information on the storage and handling of polyurethane components can be obtained by contacting our Technical Service Department.

Packaging

Polyol Component 25 Kgs, 200 Kgs
Isocyanate Component 25 Kgs, 200 Kgs

Safety Considerations Customer should refer to the Dow product Material Safety Data Sheet (MSDS) to understand the hazards of the product and safe handling guidance.

Customer Notice Dow encourages its customers to review their applications of Dow products from the standpoint of human health and environmental quality. For further information about safety considerations for your product/application, please contact your Dow Sales representative.

Contact Information:
For more information
contact:
www.dowhyperlast.com

Notice: No freedom from any patent owned by Dow or others is to be inferred.

Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. Dow assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.