



Formulated Systems

PRODUCT INFORMATION

TECHNICAL DATASHEET

7/28/2011

DURELAST 3421

Introduction

DURELAST™ 3421 is an unfilled two component polyurethane system which has been developed for the production of integrally moulded edging and insets onto laminated particle board furniture components such as table tops, computer consoles, kitchen workshops and desks. DURELAST 3421 can be supplied pigmented to a range of colours but will discolour when exposed to UV light therefore is only recommended for the production of dark colours.

Component Properties

Polyol Component

Product Reference	DURELAST 3421 Polyol
Appearance	Pale Straw Liquid at 25 °C
Viscosity	1500 – 3500 cP at 25 °C
Specific Gravity	1 – 1.02 at 25 °C

Isocyanate Component

Product Reference	HYPERLAST LE 5000 Isocyanate
Appearance	Brown Liquid at 25 °C
Viscosity	180 – 260 mPa.s at 25 °C
Specific Gravity	1.23 – 1.25 at 25 °C

Mixed System

Mixing Ratio	1.58 : 1 by weight (Polyol : Isocyanate)
Gel Time	2' 00" – 3' 00" (100 g at 25 °C)

Cured System – Typical Properties

Property	Test Method	Value	Unit
Shore Hardness	BS EN ISO 868	75 – 85	°D
Tensile Strength	BS 903 Pt A2	30	MPa
Elongation at Break	BS 903 Pt A2	20	%
Density	BS 903 Pt A1	1100	kg/m ³
Flexural Modulus	ASTM D790	1300	MPa

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	0 – 30 °C
Isocyanate Component	0 – 30 °C
Mould Temperature	30 – 60 °C
Typical Demould Time	5 – 10 minutes

Recommended Cure Cycle

24 hours at ambient temperature to full cure.

Additional Processing Details

For additional processing advice on DURELAST™ edging systems please consult our Technical Service Department.

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.	12 months
Isocyanate Component	Store in tightly sealed containers at a temperature of 24 – 35 °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	24.5 kg
Isocyanate Component	25 kg, 250 kg

Safety Considerations

Safety Data Sheets (SDS) are available from The Dow Chemical Company. SDS are provided to help customers satisfy their own handling, safety and disposal needs, and those that may be required by locally applicable health and safety regulations. SDS sheets are updated regularly. Therefore, please request and review the most current SDS before handling or using any product. Copies of the SDS are available on request through your nearest Dow Sales office.

Customer Notice

Dow encourages its customers to review their applications of Dow products from the standpoint of human health and environmental quality. To help ensure that Dow products are not used in ways for which they were not intended or tested, Dow personnel are willing to assist in dealing with ecological and products safety consideration. Your Dow representative can arrange the proper contacts.

Contact Information:

For more information
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