

## **Advanced Materials**

# RenShape<sup>©</sup> BM 5173

# HIGH-IMPACT, ABRASION RESISTANT BOARD MATERIAL EASILY MACHINABLE

KEY PROPERTIES	Excellent machinability		
	High abrasion resistance		
	<ul><li>Excellent edge strength</li><li>High impact strength</li></ul>		
APPLICATIONS	Pattern plates		
	Core boxes		
	Tooling jigs		

#### PRODUCT DATA

Product	Colour	Test method
RenShape <sup>©</sup> BM 5173	Dark blue	visual

### PROPERTIES

Density	ISO 1183	g/cm <sup>3</sup>	1.25
Hardness	ISO 868	Shore D	80 - 85
Coefficient of thermal expansion	ISO 11359	10 <sup>-6</sup> k <sup>-1</sup>	75
Deflection temperature	ISO 75	°C	80 - 85
Compressive strength	ISO 604	MPa	85 - 90
Compressive modulus	ISO 604	MPa	2900 - 3000
Flexural strength	ISO 178	MPa	90 - 95



#### BONDING

System		Araldite <sup>©</sup> AW 106 HV 953U
Appearance	visual	Transparent
Mix ratio	Parts by weight	100 : 80
Pot life at 25°C	min	60 - 90
Clamping time	h	18

#### REPAIR

Repair with bonded inserts.

1000 x 500 x 100

MILLING	Milling parameter available on request.					
STORAGE	Board material may be stored flat in original cartons at 2° to 40° C in a dry area. Temperature variations should be avoided when transporting and storing board material.					
WORKING CONDITION	The product should be used when in the temperature range 20° to 25° C.					
PACKAGING						
	Dimensions	Volume (I)	Weight (kg)	Number of Boards (per pack)	Number of Boards (per pallet)	
	1000 x 500 x 50	25	30 - 31	2	24	

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### HANDLING

PRECAUTIONS

Caution Our products are generally quite harmless to handle provided that certain precautions normally taken when handling chemicals are observed. The uncured materials must not, for instance, be allowed to come into contact with foodstuffs or food utensils, and measures should be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The wearing of impervious rubber or plastic gloves will normally be necessary; likewise the use of eye protection. The skin should be thoroughly cleansed at the end of each working period by washing with soap and warm water. The use of solvents is to be avoided. Disposable paper - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. These precautions are described in greater detail in the Material Safety Data sheets for the individual products and should be referred to for fuller information.

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Enriching lives through innovation

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