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Advanced Materials

RenShape© BM 5173

HIGH-IMPACT, ABRASION RESISTANT BOARD MATERIAL
EASILY MACHINABLE

KEY PROPERTIES

- **Excellent machinability**
- **High abrasion resistance**
- **Excellent edge strength**
- **High impact strength**
- **Good heat resistance**

APPLICATIONS

- Pattern plates
- Core boxes
- Tooling jigs

PRODUCT DATA

Product	Colour	Test method
RenShape© BM 5173	Dark blue	visual

PROPERTIES

Density	**ISO 1183**	g/cm^3	1.25
Hardness	**ISO 868**	Shore D	80 - 85
Coefficient of thermal expansion	**ISO 11359**	10^{-6} k^{-1}	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© AW 106 HV 953U
Appearance	**visual**	Transparent
Mix ratio	**Parts by weight**	100 : 80
Pot life at 25ºC	**min**	60 - 90
Clamping time	**h**	18

REPAIR

Repair with bonded inserts.

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 (l)	Weight (kg)	Number of Boards (per pack)	Number of Boards (per pallet)
1000 x 500 x 50	25	30 - 31	2	24
1000 x 500 x 100	50	61 - 62	1	12

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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