HUNTSMAN
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Advanced Materials

RenShape© BM 5166

BOARD MATERIAL
SHEET METAL FORMING TOOLING BOARD

KEY PROPERTIES

- **Good abrasion resistance**
- **Low coefficient of thermal expansion**
- **Excellent compressive strength**
- **High density**
- **Good heat resistance**
- **Good machinability**

APPLICATIONS

- Sheet metal forming tools
- Tooling jigs and fixtures

PRODUCT DATA

Product	Colour	Test method
RenShape BM 5166	Ivory	Visual

PROPERTIES

Density	**ISO 1183**	g/cm^3	1.7
Hardness	**ISO 868**	Shore D	85 - -90
Coefficient of thermal expansion	**ISO 11359**	$10^{-6} k^{-1}$	45 - 50
Deflection temperature	**ISO 75**	^oC	75 - 80
Compressive strength	**ISO 604**	MPa	90 - 100
Compressive modulus	**ISO 604**	MPa	7000 - 7500
Flexural strength	**ISO 178**	MPa	55 - 65

BONDING

System		Araldite© AW 106 HV 953U
Appearance	**Visual**	Transparent
Mix ratio	**Parts by weight**	100 : 60
Pot Life	**min**	60 - 90
Clamping time	**h**	12

Notes: Sheet metal forming

REPAIR

System		Araldite© AV 5308 HV 5309-1	RenPIM© 5219 A/B RenPIM© 5217 B DT 082
Appearance	**visual**	Beige thixotropic	Beige thixotropic
Mix ratio	**Parts by weight**	100 : 100	80 : 50 : 50 : 500
Pot life at 25°C	**min**	30 - 40	2 - 3
Cure time	**h**	15	2 - 3

Notes: Alternatively repair with adhesive bonded insert.
Araldite AW 106 and HV 953U are supplied in smaller packs than Araldite 2011.
Araldite AV 5308 and HV 5309 are supplied in smaller packs than Araldite 2015.

MILLING

Milling parameter available on request.

STORAGE

Board material may be stored flat in original cartons at 2o to 40o 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 20o to 25o C.

PACKAGING

Dimensions (mm)	Volume (l)	Weight (kg)	Number of Boards (per pack)	Number of Boards (per pallet)
750 x500X 50	16	26 - 30	2	24
750 x500x100	32	53 - 56	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.

Huntsman Advanced Materials
(Switzerland) GmbH
Klybeckstrasse 200
4057 Basel
Switzerland

Tel: +41 (0)61 299 11 11
Fax: +41 (0)61 299 11 12

www.huntsman.com/advanced_materials
Email: advanced_materials@huntsman.com



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