

Advanced Materials**XD 4618-1 Resin / Hardener (Marine Paste)**

MODELLING PASTE
MACHINE APPLIED, EPOXY PASTE

KEY PROPERTIES

- Quick model build up via high output automated equipment
- 10 to 20 mm thickness layer
- Virtually odourless during application and cutting
- Room temperature curing, machinable after 2 days
- Easily machined formulation, producing a fine, seamless surface

APPLICATIONS

- Models

PRODUCT DATA

Property	Unit	XD 4618-1 Resin	XD 4618-1 Hardener
Appearance Colour	visual	Paste Light Grey	Paste Off-white
Density	g/cm ³	0.85-0.95	0.85-0.95

PROCESSING

Mix ratio	Parts by weight	Parts by volume
XD 4618-1 Resin	100	100
XD 4618-1 Hardener	50	50

- Ensure substructure is strong, stable, clean and free of loose material.
- Apply paste by using suitable equipment.
- Allow to cure for at least 48 hours at room temperature before machining

**TYPICAL
PROPERTIES**

Resin/Hardener mix:	Volume	Unit	XD 4618-1 Resin/ Hardener
Appearance			Light Grey
Pot life at 25°C	1000 ml	min	300
Max. Layer thickness		mm	20
Machinable after		day	2

After cure: 7 days at RT

Density	ISO 1183	g/cm ³	0.95-1.0
Hardness	ISO 868	Shore D	65-75
Coefficient of thermal expansion	ISO 11359	10 ⁻⁶ k ⁻¹	45-50
Heat Deflection Temperature	ISO 75	°C	47
Compressive strength	ISO 604	MPa	51
Compressive modulus	ISO 604	MPa	1900
Flexural strength	ISO 178	MPa	29
Tensile strength	ISO R 527/1	MPa	21
Linear shrinkage**		mm/m	1.0
**Test sample 1000 x 60 x 40mm, released.			

STORAGE

The resin and hardeners have yet to be fully determined, but will be at least 6 to 12 months provided they are stored at 18 – 25°C in a dry place and in sealed containers, preferably those in which they are supplied.

PACKAGING

System	XD 4618-1 Resin	XD 4618-1 Hardener
Pack sizes (kg)	30 150	30 150

**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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