

Modelling Paste

RenPaste[®] SV 4503-1 with Ren[®] HV 4503-1

Machine applied, medium density, brown epoxy paste

Key properties

- Quick model build up via high output automated equipment
- 40mm thickness layer in one single application
- Low levels of exotherm
- Virtually odourless during application and cutting
- Room temperature curing, machinable after 1 day
- Easily machined formulation, producing a fine, seamless surface
- Superior dimensional stability

Applications

- Production of models and moulds

Product data

Property	Unit	RenPaste SV 4503-1	Ren HV 4503-1
Appearance Colour	visual	Paste Brown	Paste White
Density	g/cm ³	0.7 – 0.8	0.7 – 0.8

Processing

Mix ratio	Parts by weight	Parts by volume
RenPaste SV 4503-1	100	100
Ren HV 4503-1	100	100

Ensure substructure is strong, stable, clean and free of loose material.
 Apply paste as a single layer up to 40mm in thickness using equipment.
 Allow to cure for at least 24 hours at room temperature before machining

Typical Properties

Resin/Hardener mix:	Volume	Unit	SV/HV 4503-1
Appearance			Brown
Pot life at 25°C	1000 ml	min	15
Max. Layer thickness		mm	40
Machinable after		day	1

After cure: 3days @ Room Temperature (8 Hours @ 80°C)

Density	ISO 1183	g/cm ³	0.75 – 0.8
Hardness	ISO 868	Shore D	55 - 60
Coefficient of thermal expansion	ISO 11359	10 ⁻⁶ k ⁻¹	101 (104)
Deflection temperature	ISO 75/Tg	°C	42 (54)
Compressive strength	ISO 604	MPa	11.5 (15)
Compressive modulus	ISO 604	MPa	550 (630)
Flexural strength	ISO 178	MPa	11 (12)
Linear shrinkage*		mm/m	1

*Test sample 1000 x 60 x 40mm, released.

Storage

The resin and hardeners described in this instruction sheet have the expiry date indicated on the container label, 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	SV 4503-1	HV 4503-1
Pack size (kg)	32 120	32 120

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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Duxford, Cambridge
England CB2 4QA

Tel: +44 (0) 1223 493 000
Fax: +44 (0) 1223 493 002

www.renshape.com

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