



Modelling Paste

RenPaste SV 427-2 / Ren[®] HV 427-1

Epoxy resin paste for manual application

Key properties

- Cold setting, room temperature curing, low density formulation
- Combines the stability of epoxy resins with the machinability of wood
- Bonds with most structural materials
- Can be worked with patternmakers' tools
- With different hardeners suitable for bonding RenShape boards

Applications

- Construction of models and patterns
- Alteration or repair of existing models and patterns (resin, wood)

Product data

Property	Unit	RenPaste SV 427-2	Ren HV 427-1
Appearance Colour	visual	Light paste Brown	Paste Dark brown
Density	g/cm ³	0.6	0.6

Processing

Mix ratio	Parts by weight	Parts by volume
RenPaste SV 427-2	100	100
Ren HV 427-1	100	100

Mix the two components thoroughly in the ratio indicated until the mixture has a homogenous colour. Mixing can be done manually or by using a planetary/kneader/dough mixer. To produce layers of controlled thickness, roll out between spacers onto polythene and apply as a pre-form. Post-curing will improve final properties.

Properties

Resin/Hardener mix:	Volume	Unit	SV 427-2 HV 427-1
Appearance			Brown
Pot life at 25°C	1000 ml	min	40
Max. Layer thickness		mm	20
Demoulding time		h	12

After cure: 7 days at RT or 14 hours at 40°C

Density	ISO 1183	g/cm ³	0.6
Hardness	ISO 868	Shore D	50-55
Coefficient of thermal expansion	ISO 11359	10 ⁻⁶ k ⁻¹	65-70
Deflection temperature	ISO 75	°C	55-60
Compressive strength	ISO 604	MPa	20-25
Compressive modulus	ISO 604	MPa	950
Flexural strength	ISO 178	MPa	20-25
Linear shrinkage		mm/m	0.6

Storage

The resin and hardeners described in this instruction sheet have the shelf lives shown, provided they are stored at 18 - 25°C in a dry place and in sealed containers, preferably those in which they are supplied.

Working condition

Packaging

System	SV 427-2	HV 427-1
Quantity and Weight	1 x 10kg	1 x 10kg

Handling precautions

Caution

Vantico 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 Vantico publication No. 24264/3/e Hygienic precautions for handling plastics products of Vantico and in the Vantico Material Safety Data sheets for the individual products. These publications are available on request and should be referred to for fuller information.

Vantico Limited Adhesives and Tooling

All recommendations for the use of our products, whether given by us in writing, verbally, or to be implied from the results of tests carried out by us, are based on the current state of our knowledge. Notwithstanding any such recommendations the Buyer shall remain responsible for satisfying himself that the products as supplied by us are suitable for his intended process or purpose. Since we cannot control the application, use or processing of the products, we cannot accept responsibility therefor. The Buyer shall ensure that the intended use of the products will not infringe any third party's intellectual property rights. We warrant that our products are free from defects in accordance with and subject to our general conditions of supply.

Duxford, Cambridge
England CB2 4QA

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

www.tooling.vantico.com

© Vantico Ltd, 2002

® Ren and RenShape are registered trademarks of Vantico AG, Basel, Switzerland