HUNTSMAN

Enriching lives through innovation

Advanced Materials

RenPaste™ SV 427-2 / Ren® HV 427-1

MODELLING PASTE
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
Viscosity at 25°C	mPas	8,000-12,000**	30,000-45,000**
Density	g/cm^3	0.6	0.6

** *Specified data are on a regular basis analysed. Data which is described in this document as 'typical' is not analysed on a regular basis and is given for information purposes only. Data values are not guaranteed or warranted unless if specifically mentioned.*

TYPICAL SYSTEM DATA

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 25ºC	**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

Provided that RenPaste™ SV 427-2 and Ren® HV 427-1 are stored in a dry place in their original, properly closed containers at the storage temperatures mentioned in the MSDS they will have the shelf lives indicated on the labels. Partly emptied containers should be closed immediately after use.

WORKING CONDITION

The products should be handled when in the temperature range of 18 - 25°C.

PACKAGING

System	RenPaste™ SV 427-2	Ren® HV 427-1
Quantity and Weight	1 x 10 kg	1 x 10 kg

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

Enriching lives through innovation

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

ISO 9001
DNV
REGISTERED