

Advanced Materials

RenCast® CW 61 / Ren® HY 97 blue

CASTING RESIN HIGH TEMPERATURE RESISTANT CASTING SYSTEM

KEY PROPERTIES

- 110 ℃ temperature resistance
- High strength at demould
- Easily machinable
- · Very easy to pour due to low viscosity
- Chemical resistant

APPLICATIONS

- Temperature resistant tooling
- Vacuum forming tools
- · Foam moulding tooling
- Tools for pre-preg lamination

PRODUCT DATA

Property	Unit	RenCast [®] CW 61	Ren [®] HY 97 blue
Appearance Colour	visual	Thick liquid Grey	Liquid Blue
Viscosity at 25ºC	mPas	600,000 - 1,000,000**	20 - 40**
Density	g/cm ³	1.8 - 1.9**	0.90 - 0.94**

^{**} 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
RenCast [®] CW 61	100
Ren [®] HY 97 blue	10

Mix the two components thoroughly in the ratio indicated.

If fine details are to be reproduced, a thin layer of mixed resin and hardener should be applied to the mould surface using a short bristle brush before casting.

Evacuated materiel will improve properties. Post-curing will improve final properties.



PROPERTIES

Resin/Hardener mix:	Volume	Unit	RenCast [®] CW 61 Ren [®] HY 97 blue
Appearance			Grey
Viscosity at 25°C		m Pa s	3,000
Pot life at 25°C	1000 ml	min	150
Max. Layer thickness		mm	40
Demoulding time		h	24

After cure: 14h gradually up to 100°C

Density	ISO 1183	g/cm ³	1.75
Hardness	ISO 868	Shore D	90
Coefficient of thermal expansion	ISO 11359	10 ⁻⁶ k ⁻¹	45
Deflection temperature	ISO 75	ōС	110
Compressive strength	ISO 604	МРа	135
Compressive modulus	ISO 604	МРа	7,500
Flexural strength	ISO 178	МРа	95
Linear shrinkage		mm/m	0.4
Abrasion resistance	Taber	mm ³ /100U	50-55

STORAGE

Provided that RenCast® CW 61 and Ren® HY 97 blue 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 CONDITIONS

The product should be used when in the temperature range 18-25°C.

PACKAGING

System	RenCast® CW 61	Ren [®] HY 97 blue
Quantity and Weight	1 x 10 kg	4 x 1 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 Advanced Materials warrants only that its products meet the specifications agreed with the user. Specified data are analysed on a regular basis. Data which is described in this document as 'typical' or 'guideline' 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.

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