

**Advanced Materials****RenCast<sup>®</sup> CW 2215 / Ren<sup>®</sup> HY 5160 or HY 5161  
or HY 5162**CASTING RESIN  
MINERAL FILLED EPOXY SYSTEM IN A RANGE OF REACTIVITIES**KEY  
PROPERTIES**

- Suitable for full or face castings
- Cures at room temperature
- Cure rate determined by choice of hardener
- Layers up to 80mm thick can be cast in a single operation
- Readily machinable when cured
- Mixes can be pigmented with colouring pastes DW 0131-DW 0137

**APPLICATIONS**

- Construction of foundry patterns
- Jigs and fixtures
- Copy-milling models
- Working models for the ceramics industry
- Suitable for a wide range of applications

**PRODUCT DATA**

Property	Unit	RenCast <sup>®</sup> CW 2215	Ren <sup>®</sup> HY 5160	Ren <sup>®</sup> HY 5161	Ren <sup>®</sup> HY 5162
Appearance Colour	visual	Paste Pale beige	Clear liquid Pale yellow	Clear liquid Pale yellow	Clear liquid Pale yellow
Viscosity at 25°C	mPas	80,000-140,000	30 - 40	30 - 70	30 - 70
Density	g/cm <sup>3</sup>	1.7	1.0	1.0	1.0

**PROCESSING**

Mix ratio	Parts by weight		
RenCast <sup>®</sup> CW 2215	100	100	100
Ren <sup>®</sup> HY 5160	20	-	-
Ren <sup>®</sup> HY 5161	-	20	-
Ren <sup>®</sup> HY 5162	-	-	20

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 material will improve properties. Post-curing will improve final properties.

**PROPERTIES**

Resin/Hardener mix:	Volume	Unit	CW 2215 HY 5160	CW 2215 HY 5161	CW 2215 HY 5162
Appearance			Yellow	Yellow	Yellow
Viscosity at 25°C		m Pa s	4,000	5,000	5,000
Pot life at 25°C	1000 ml	min	120	45	25
Max. Layer thickness		mm	80	20	10
Demoulding time		h	16	12	10

*After cure: 7 days at 25°C / 14 hours at 40°C*

Density	ISO 1183	g/cm <sup>3</sup>	1.6	1.6	1.6
Hardness	ISO 868	Shore D	85-90	85-90	85-90
Coefficient of thermal expansion	ISO 11359	10 <sup>-6</sup> k <sup>-1</sup>	45	45	45
Deflection temperature	ISO 75	°C	50-55	55-60	60-65
Compressive strength	ISO 604	MPa	80-90	80-90	80-90
Compressive modulus	ISO 604	MPa	3,500-4,000	3,500-4,000	3,500-4,000
Flexural strength	ISO 178	MPa	65-75	60-70	60-70
Linear shrinkage		mm/m	0.1	0.7	0.3
Abrasion resistance	Taber	mm <sup>3</sup> /100U	90-100	90-100	90-100

**STORAGE**

The resin and hardeners described in this instruction sheet have the shelf lives shown provided they are stored at 6 - 28°C in a dry place and sealed containers, preferably those in which they are supplied.

**WORKING CONDITIONS**

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

**PACKAGING**

System	CW 2215	HY 5160	HY 5161	HY 5162
Quantity and Weight	1 x 10kg	4 x 2kg	4 x 2kg	4 x 2kg
Quantity and Weight	6 x 750gr	6 x 150gr	6 x 150gr	6 x 150gr

**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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Main Office :  
**Huntsman Advanced Materials (Switzerland) GmbH**  
Klybeckstrasse 200  
CH-4057 BASEL  
Switzerland  
+41 61 966 3333