

## **Advanced Materials**

## RenCast® 6425 A / RenCast® 5425 B

FOR THE PRODUCTION OF CASTINGS AND IN APPLICATIONS REQUIRING HIGH LEVELS OF TOUGHNESS AND DURABILITY

#### **KEY PROPERTIES**

- · Withstand moisture well, thus also suitable for thin layers
- · High tear strength and elongation
- · High abrasion resistance

#### **APPLICATIONS**

- Foundry Patterns
- Core boxes
- · Abrasion and impact-resistant parts
- · Percussion tools
- · Impact protection
- Conveyor rollers
- Machinery Parts
- Assembly jigs

#### PRODUCT DATA

Property	Unit	RenCast <sup>®</sup> 6425 A	RenCast <sup>®</sup> 5425 B
Appearance Colour	visual	Liquid brown	Liquid pale yellow
Viscosity at 25°C	mPas	1800 - 3200**	200 - 400**
Density at 23°C	g/cm³	1.11	1.13

<sup>\*\*</sup> 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® 6425 A	100	
RenCast <sup>®</sup> 5425 B	24	

Mix the two components thoroughly in the ratio indicated.

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



### **PROPERTIES**

Resin/Hardener mix:	Volume	Unit	RenCast <sup>®</sup> 6425 A RenCast <sup>®</sup> 5425 B
Appearance			Brown
Mix viscosity 25°C		mPa s	1900 - 2100
Pot life at 25°C	1000 ml	min	15 - 20
Max. layer thickness		mm	10 - 12
Demoulding time* at 23°C		hours	20 - 24

Density	ISO 1183	g/cm <sup>3</sup>	1.20
Hardness	ISO 868	Shore D	60 - 65
Tear propagation resistance	DIN 53356	kN/m	28 - 30
Tensile strength	ISO 527-2	MPas	30 - 35
Elongation at break	ISO 527-2	%	130 - 170
Torsional Test DMA, 2K/Min	ISO 6721	°C	90
Linear shrinkage**		mm/m	1.8
Abrasion***	Taber	mg	1600

<sup>\*</sup> For parts with uniform face-cast layers of 8-12 mm, allow 20 - 24 hours of final cure time prior to demoulding. To avoid creep, always store parts on a flat surface without stressing. Follow recommendation for curing before subjecting the parts to loading.

### **STORAGE**

Provided that RenCast<sup>®</sup> 6425 A and RenCast<sup>®</sup> 5425 B 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 <sup>®</sup> 6425 A	RenCast <sup>®</sup> 5425 B
Quantity and Weight	4 x 5 kg	4.8 kg

<sup>\*\*</sup>Shrinkage measurement using test specimen size 500 x 50 x 10mm

<sup>\*\*\*</sup> Lost weight by 4000 cycles, 60 rpm, 1kg load, S 60 sandpaper strips



# 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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