

## Advanced Materials

# RenCast<sup>®</sup> 6425 A / RenCast<sup>®</sup> 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/cm <sup>3</sup> | 1.11                        | 1.13                        |

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

Mix the two components thoroughly in the ratio indicated.

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

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**PROPERTIES**

| Resin/Hardener mix:         | Volume  | Unit  | RenCast <sup>®</sup> 6425 A<br>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*<br>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<br>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<br>DMA, 2K/Min  | ISO 6721  | °C                | 90        |
| Linear shrinkage**             |           | mm/m              | 1.8       |
| Abrasion***                    | Taber     | mg                | 1600      |

\* 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.

\*\*Shrinkage measurement using test specimen size 500 x 50 x 10mm

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

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**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.

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**WORKING  
CONDITIONS**

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

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**PACKAGING**

| System              | RenCast <sup>®</sup> 6425 A | RenCast <sup>®</sup> 5425 B |
|---------------------|-----------------------------|-----------------------------|
| Quantity and Weight | 4 x 5 kg                    | 4.8 kg                      |

**HANDLING  
PRECAUTIONS****Caution**

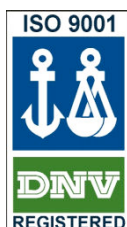
Our products are generally quite harmless to handle provided that certain precautions normally taken when handling chemicals are observed. The uncured materials must not, for instance, be allowed to come into contact with foodstuffs or food utensils, and measures should be taken to prevent the uncured 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.

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