

# **MACROMELT 2084**

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### **PRODUCT DESCRIPTION**

MACROMELT 2084 provides the following product characteristics:

| Technology   | Polyamide        |
|--------------|------------------|
| Product Type | Hotmelt          |
| Cure         | Physical setting |
| Condition    | Thermoplastic    |
| Components   | One-component    |
| Application  | Foundry          |
| Color        | Amber            |

### **Application Areas**

MACROMELT 2084 is applied in the foundry industry. Due to the fast setting speed MACROMELT 2084 is especially used for bonding sand cores by automatical application.

# **TECHNICAL DATA**

| Macromelt 2084:   |                               |
|---|-------------------------------|
| Softening point, °C   | 165 to 175                    |
| ASTM E28 (in glycerine)   |                               |
| Melting Viscosity at 180 °C, mPas   | 200 to 400                    |
| Melting Viscosity at 190 °C, mPas<br>ASTM D 3236 (RVT, spindle 21)                      | 80 to 160                     |
| Temperature creep resistance, °C<br>Henkel method AIE SKE 10-05                         | 150                           |
| Open Time, seconds<br>Henkel method AIE SKE 10-21*                                      | ~7                            |
| Setting Time, seconds<br>Henkel method AIE SKE 10-21*                                   | approx. 5 (5 sec. open time)  |
| Setting Time, seconds<br>Henkel method AIE SKE 10-21*                                   | approx. 10 (2 sec. open time) |
| *Coldbox stick, 20°C, Distance: 1mm, Appl.<br>temp.: 190°C, Quantity: 0.45-0.50g, Area: |                               |
| 22 x 22mm, Pressure: 10N  |                               |

22 x 22mm, Pressure: 10N

## DIRECTIONS FOR USE

## **Preliminary Statement:**

Prior to application it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed.

### Preparation:

The surfaces of the substrate must be dry and free from oil, grease and dust.

#### **Application:**

Application Temperature : 180 to 200 °C

Application System : Hotmelt application systems

MACROMELT 2084 is applied by melting equipment with a gear pump.

When bonding to a substrate with high thermal conductivity the use of a specific application temperature is required for good wetting. Do not heat the product above the specified application temperature range. When the product is not in use do not apply heat, this will degrade the quality of the product and in extreme cases cause carbonisation. The standby temperature for the product is 130°C, but not longer than 72 hours. MACROMELT 2084 may absorb moisture from the air. This will not be apparent in the solid form, but may cause bubbles on heating and could affect the bond quality. It is important, therefore, that containers are kept closed and sealed when not in use.

Apply the adhesive as closely as possible to the side where the parts to be bonded are joined and in a thickness ensuring complete and intensive coating of both surfaces.

Immediately after joining, keep the parts pressed together until the bonded join is held by the adhesive itself. The time which this requires is largely dependent on the recovery of the material to be bonded. If the join is parted even by some tenths of millimeters during the binding stage, a ridge is formed which leads to reduced load capacity of the join.

#### Cleaning:

Carbonised and set (non thermoplastic) material must be removed mechanically. Removal of the thermoplastic material from the hot apparatus can be achieved with solvent free cleaning system, such as Macromelt 0062 (see separate technical information)

#### **Classification:**

Please refer to the corresponding **safety data sheets** for details on:

Hazardous Information Transport Regulations Safety Regulations

#### Storage:

When properly stored in a cool, dry location, with the container tightly closed when not in use, this product will have a shelf life of at least 24 months.

# ADDITIONAL INFORMATION

#### **Disclaimer:**

The information provided herein, especially recommendations for the usage and the application of our products, is based upon our knowledge and experience. Due to different materials used as well as to varying working conditions beyond our control we strictly recommend to carry out intensive trials to test the suitability of our products with regard to the required processes and applications. We do not accept any liability with regard to the above information or with regard to any verbal recommendation, except for cases where we are liable of gross negligence or false intention.

This datasheet replaces all former versions.

Reference 0.0

