



INSURAL 80 MASTIC

ALUMINIUM CONTACT APPLICATIONS INSULATING MASTIC

INSURAL™ 80 mastic is a durable, asbestos-free, insulating composition for jointing, bedding and patching INSURAL 140 and 180 precast refractory shapes.

COMPOSITION

Material	Approximate Percentage of Weight
SiO ₂	76%
Al ₂ O ₃	22%

BENEFITS

- Low shrinkage reduces joint pull-out
- Good surface strength reduces erosion risk in repaired areas and joints
- Non-wetting to molten aluminium
- No chemical reaction reduces chemical adhesion to mastic

APPLICATIONS

- Refractory repair and patching
- Troughs
- Launderers
- Billet casting refractories

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PHYSICAL PROPERTIES

Property	Value
Wet Density–kg/m ³ (lb/ft ³)	1200–1400 (74.91–87.40)
Fired Density– kg/m ³ (lb/ft ³)	650–850 (40.58–53.06)
Maximum Service Temperature	1000°C (1832°F)
Thermal Conductivity– W/m·K (BTU-in/ft ² -hr·°F)	
at 206°C (403°F)	0.15 (1.04)
at 407°C (765°F)	0.19 (1.32)
at 655°C (1211°F)	0.23 (1.60)

USE INSTRUCTIONS

1. Clean loose debris and refractory from the application surface with a clean damp cloth.
2. Apply mastic with either a trowel or gloved hands.
3. The mastic should be flat, but should extend slightly beyond the surrounding refractory to allow for shrinkage.
4. Let the mastic dry for 12–24 hours to remove moisture.
5. Once the mastic is dry, use sandpaper to smooth any surface imperfections.
6. Preheat the mastic to at least 80°C (176°F) prior to molten metal contact.

HEALTH AND SAFETY

Prior to use, refer to the product safety datasheet for proper handling and required personal protective equipment.

STORAGE AND TRANSPORTATION

- 12-month shelf life from the manufacture date, when stored unopened in the original packaging at room temperature
- Avoid freezing temperatures during transportation and storage as the product could be rendered unusable if frozen

