



# OWL WATERPROOFING SOLUTIONS

## OWL PU MASTIC

Date: 12. 03. 2024 - V. 24  
TECHNICAL DATA SHEET

### Flexible Polyurethane Joint Sealer Mastic

#### Product Description

Owl PU Mastic is a cold-applied, cold-curing thixotropic dynamically flexible polyurethane mastic designed for caulking joint-sealing adhesive.

#### Product Information

<b>Chemical Base</b>	Flexible, single-component polyurethane elastomer, healed by ground and air moisture.
<b>Packaging</b>	300 ml cartridges 600ml sausages
<b>Colour**</b>	Grey, White
<b>Shelf Life</b>	12 months from the date of production

#### Main Uses

Owl PU Mastic is used for:

- Joints between timber, metal, aluminum, or PVC frames and masonry
- Extension & caulking joints in nearly all construction materials
- Joint sealing of interior/exterior movement joints
- Mastic for patching cracks

#### Advantages

- Easy to apply
- Weather-resistant
- Withstands continuous movement
- Resistant to water, heat, and frost
- Retains mechanical properties within a temperature range of -30°C to +90°C
- Offers strong adhesion to most construction materials
- Resistant to detergents, oils, fuels, and seawater

#### Consumption

Consumption depends on volume of the joint or crack to be sealed

#### Technical Data\*

PROPERTY	RESULTS	TEST METHOD
Composition	Polyurethane mastic (pre-polymer)	
Elongation at Break	600%	DIN 53504
Modulus of elasticity (at 100%)	0.40 N/mm <sup>2</sup>	DIN 53504
Tensile Strength	1.2 N/mm <sup>2</sup>	DIN 53504
Hardness (Shore A Scale)	15-25	DIN 53505, ASTM D 2240
Application Temperature	5° C to 35° C	Inhouse Lab



# OWL WATERPROOFING SOLUTIONS

<b>Skin formation time</b>	15 min (at 23°C, 50%RH)	Inhouse Lab
<b>Polymerized thickness after 24 hours</b>	3 mm (at 23°C, 50%RH)	Inhouse Lab
<b>Resistance to flow at 23°C</b>	≤3mm	ISO 7390
<b>Resistance to flow at 50°C</b>	≤3mm	ISO 7390
<b>Chemical properties</b>	Provides strong resistance to water, cleaning agents, and occasional exposure to oils, hydrocarbons, and 10% acidic or alkaline solutions. Polyurethane is sensitive to UV rays, causing light colors to fade over time, but this change in appearance does not affect its mechanical properties or sealing performance.	

**Sealant For Façade Elements: EN-15651-1: F-EXT-INT-CC**

**Sealant For Pedestrian Walkways: EN-15651-4: PW-EXT-INT-CC**



Key Characteristics	Performance	Matched Technical Specification
<b>Fire Resistance</b>	E	EN 15651-1/EN 15651-4
<b>Flow Resistance</b>	<3mm	EN 15651-1/EN 15651-4
<b>Volume Reduction</b>	<10%	EN 15651-1/EN 15651-4
<b>Tensile Strength after Water Exposure</b>	No Failure	EN 15651-1/EN 15651-4
<b>General Tensile Strength</b>	<0,4	EN 15651-1/EN 15651-4
<b>Tensile Strength for Non-Structural Sealants in Cold Climates (-30°C)</b>	<0,9	EN 15651-1/EN 15651-4
<b>Tensile Strength at Sustained Extension (-30°C)</b>	No Failure	EN 15651-1/EN 15651-4
<b>Adhesion/Cohesion at Fluctuating Temperatures</b>	No Failure	EN 15651-1/EN 15651-4
<b>Long-Term Durability</b>	Pass	EN 15651-1/EN 15651-4

## **Application:**

### **Surface Preparation:**

- 1. Remove Contaminants & Eliminate Loose Debris:**  
Ensure all oils, grease, and other pollutants that could affect adhesion are cleaned from the surface. Clear any excess materials or debris from the surface.
- 2. Concrete Surfaces:**  
Ensure concrete is sturdy, fully cured for at least 28 days, and the moisture content does not exceed 5%.
- 3. Surface Testing:**  
Before applying the mastic, test a small section for proper adhesion, color compatibility, and chemical resistance.

**Joint Preparation:** Joint Sizing needs to be appropriate. The joint width should be between 10 and 30 mm. The width-to-depth ratio of the joint should be approximately 2:1.



# OWL WATERPROOFING SOLUTIONS

## **Movement Joint Sealing for Roof Waterproofing:**

1. **Seal the Bottom of the Joint:**  
Use Owl PU Mastic Joint-Sealant to seal only the bottom of the joint.
2. **Apply Lava 20 Layer:**  
Brush a 200mm wide strip of Lava 20 centered over the joint.
3. **Press Polyester Fabric:**  
Use a tool to press the polyester fabric into the Lava 20 layer until it is well saturated, ensuring the joint is completely covered.
4. **Insert Polyethylene Cord:**  
Place a polyethylene cord of the appropriate size into the joint and press it firmly into the soaked fabric.
5. **Final Seal with Mastic:**  
Apply Owl PU Mastic sealant to the remaining exposed area of the joint and allow it to cure for 12 hours.

## **Priming**

**Adhesion Testing:** If the adhesion test shows weak adherence, priming is necessary.

- **Absorbent Surfaces:** For surfaces such as concrete, screed, and wood, use Lava 20 Fast Primer to improve adhesion.
- **Non-Absorbent Surfaces:** For surfaces like metal and ceramic tiles, use Lava 20 Epoxy Primer to ensure proper bonding.

## **Sealing**

1. **Insert Joint Filler:**  
Press a flexible, non-adhesive polyethylene joint filler into the joint after the primer has dried. Ensure the filler has no holes to prevent air bubbles in the joint.
2. **Apply Mastic:**  
Use Owl PU Mastic with a pneumatic or hand-held special pistol (maximum pressure: 3.5 kg) to fill the joint. Take care to avoid trapping air/ bubbles during application. Use a joint nail or putty knife to smooth the mastic. Apply protective strips to create a clean, professional finish.
3. **Narrow Joints:**  
Apply the mastic in a single, continuous motion for narrow joints.
4. **Wide Joints:**  
For wide joints, apply the mastic in three sections:
  - a) The first two on the edges of the joint.
  - b) The third on the joint filler.
5. **Finishing:**  
Clean the joint with soapy water to remove excess mastic, ensuring no air bubbles are present. Firmly press the mastic onto the joint filler and edges. Once done, remove the protective strips.
6. **Post-Application:**  
After the mastic has polymerized, it can be painted. Perform a test first and use acrylic or vinyl dispersion paints for best results.

## **Storage**

Product should be stored in dry and cool rooms for up to 12 months. Protect the material against moisture and direct sunlight. Storage temperature: 5° to 35° C. Products should remain in their original, unopened containers, bearing the manufacturer's name, product designation, batch number and application precaution labels.

## **Safety measures**

Owl PU Mastic contains isocyanates. See information supplied by the manufacturer. Please study the Safety Data sheet.  
PROFESSIONAL USE ONLY



# OWL WATERPROOFING SOLUTIONS

Our technical advice for use, whether verbal, written or in tests, is given in good faith and reflect the current level of knowledge and experience with our products. When using our products, a detailed object-related and qualified inspection is required in each individual case in order to determine whether the product and /or application technology in question meets the specific requirements and purposes. We are liable only for our products being free from faults; correct application of our products therefore falls entirely within your scope of liability and responsibility. We will, of course, provide products of consistent quality within the scope of our General Conditions of Sale and Delivery. Users are responsible for complying with local legislation and for obtaining any required approvals or authorizations. Values in this technical data sheet are given as examples and may not be regarded as specifications. The new edition of the technical data sheet supersedes the previous technical information and renders it invalid. It is therefore necessary that you always have to hand the current code of practice. \*All values represent typical values and are not part of the product specification.