INSOLA
INNOVATIVE SOLUTIONS & APPLICATIONS

TECHNICAL DATA SHEET

Polyurethane Adhesive for Masonry Blocks

For Professional Use with an Applicator Gun

Product Description:

One-component polyurethane adhesive designed for bonding masonry blocks in non-load-bearing internal walls. It provides excellent adhesion to a wide range of construction materials, including aerated concrete, calcium silicate blocks, lightweight aggregate concrete, ceramics, concrete, plaster, stone, metal, and similar substrates.

Base	Polyurethane
Curing Mechanism	Polymerization under the influence of atmospheric moisture
Density	35-36 kg/m³
Skin Formation Time	7 min 30 s
Adjustment Time	2 min
Initial Strong Bond	25 min
Full Cure Time	24 val.
Compressive Strength with Aerated Concrete	1,7 MPa
Modulus of Elasticity with Aerated Concrete	400 MPa
Temperature Resistance of Cured Foam	(- 60 ºC …+ 110 ºC)
Yield (*) (20°C / 65% RH)	55 m’

(*) Performance values may vary depending on environmental conditions such as temperature, humidity, and the characteristics of the bonded surfaces.

Applications:

This polyurethane adhesive is intended for bonding masonry blocks in **non-load-bearing internal walls**. It adheres strongly to a variety of construction materials, including aerated concrete, calcium silicate blocks, lightweight aggregate concrete, ceramics, concrete, plaster, stone, metal, and similar substrates.
Its strong bond strength, low adhesive consumption, and reduced thermal conductivity of joints help minimize thermal bridging.

Advantages:

- Strong block bonding in as little as 25 minutes
- Suitable for both horizontal and vertical applications
- High bond strength of glued joints
- Precise and easy application
- Low adhesive consumption
- Low thermal conductivity of bonded joints
- Suitable for virtually all types of masonry blocks
- Faster and simpler application compared to traditional mortar
- Dust-free working process
- Helps prevent thermal bridges

Application Conditions:

Application temperature: **-5°C to +30°C**. Best results are achieved at **+20°C**.
Can temperature during application: **+15°C to +25°C**. Optimum performance is achieved when the can temperature is approximately **+20°C**.
Surfaces must be clean and free from dust, oil, grease, and loose particles.
The cured adhesive surface can be painted with water-based paints, filled, or plastered.

Instructions for Use:

Ensure that all surfaces are clean. Remove dust, grease, and other contaminants before application. Wear protective gloves during use.Attach the applicator gun while holding the can valve upright. After attaching the gun, shake the can thoroughly for approximately 30 seconds.
When working in low humidity conditions (below 50% relative humidity), lightly moisten the substrate. Moisture promotes expansion and curing of the foam adhesive, resulting in improved performance.
The first course of blocks must be levelled using mortar.Apply adhesive beads approximately 2 cm wide onto the masonry block. Adhesive should be applied to both horizontal and vertical surfaces. Two adhesive beads should be applied per block, positioned 1–2 cm from the edges. Adjustment time is approximately 2 minutes. A strong bond is achieved after approximately 25 minutes, while full curing occurs within 24 hours. Uncured adhesive residues are best removed using Insola Foam Cleaner. Cured excess foam should be removed mechanically. Protect cured adhesive from prolonged exposure to UV radiation.

Colour:

Light Blue

Packaging:

- 750 ml aerosol can
- Quantity per carton: 12 pcs
- Shelf life in unopened packaging: 18 months

Storage:

Store and transport cans in an upright position.
Keep in a dry, cool place at temperatures between **+5°C and +35°C**.
Aerosol cans must not be stored at temperatures exceeding **+50°C** or exposed to direct sunlight.

Safety Information:

The product is flammable.
Protect from overheating and keep away from ignition sources. Avoid direct sunlight.
Do not smoke while using the product.
May cause an allergic reaction if inhaled or upon skin contact.
Ensure adequate ventilation during application.
Wear protective gloves and safety goggles.
Keep out of reach of children.
Cured foam can be handled without health risk under normal conditions.
For detailed safety information, refer to the **Safety Data Sheet (SDS)**.