



# EUCOLASTIC 1NS

**SINGLE-COMPONENT, POLYURETHANE HYBRID SEALANT**

**EUCLID CHEMICAL**

JOINT SEALANTS

## DESCRIPTION

**EUCOLASTIC 1NS** is a single-component, non-sag, low-modulus, moisture-cure, polyurethane hybrid joint sealant. **EUCOLASTIC 1NS** is formulated with a unique silane-terminated polyurethane polymer, that provides unequalled performance against stand-alone polyurethane sealants. **EUCOLASTIC 1NS** is an extremely durable sealant in dynamic joints, offering persistent adhesion once fully cured.

## PRIMARY APPLICATIONS

- Concrete control & expansion joints
- Precast concrete panels
- EIFS
- Window & door perimeters
- Masonry
- Interior and exterior applications

## FEATURES / BENEFITS

- Skins rapidly and is tack-free in 2 to 3 hours @ 28°C
- Remains adhesively and cohesively bonded during temperature cyclic movement
- Extraordinary movement capability of +/- 35%
- Can be painted

## TECHNICAL INFORMATION

### Typical Engineering Data

The following results were developed under laboratory conditions @ 24°C:

| PROPERTY                                  | RESULT                                   |
|---|--|
| Rheology (ASTM C 639)                     | Non-sag (NS)                             |
| Extrusion Rate (ASTM C 1183)              | 93.1 ml/min.                             |
| Hardness, Shore A (ASTM C 661)            | 25                                       |
| Movement Capability (ASTM C 719)          | +/- 35%                                  |
| Skin Time                                 | 1 hour                                   |
| Tack Free Time (ASTM C 679)               | 3 to 4 hours                             |
| Adhesion-in-Peel (ASTM C 794)             | Concrete 31.5-38.5 N/cm No adhesion loss |
| Stain & Colour Change (ASTM C 510)        | No stain/No visible colour change        |
| Effects of Accelerated Aging (ASTM C 793) | Pass                                     |

**Appearance:** **EUCOLASTIC 1NS** is a single-component sealant available in grey colour.

## PACKAGING/YIELD

**EUCOLASTIC 1NS** is available in 300 ml cartridges (30 per case). One cartridge will cover 7.3 m in a 6 mm x 6 mm joint.

## SHELF LIFE

1 year in original, unpunctured cartridge

## SPECIFICATIONS / COMPLIANCES

- ASTM C 920 Type S, Grade NS, Class 35
- ASTM C 1248

EUCOLASTIC 1NS

MASTER FORMAT #:  
07 92 13

## DIRECTIONS FOR USE

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**Joint Dimensions:** Joint width should be 4 times the expected joint movement, but not less than 6 mm. Width to depth ratios should be equal for joints that are 6 mm to 13 mm in width. If joint width is 13 mm to 25 mm, the depth of **EUCOLASTIC 1NS** should be 1/2 the width, with 13 mm being the maximum allowable depth of **EUCOLASTIC 1NS**. Use backer rod or bond breaker tape to limit the depth of application and to prevent three-sided adhesion. **Applications of EUCOLASTIC 1NS that are deeper than what is recommended can cause bubbling or incomplete curing of the material.**

**Surface Preparation:** New concrete must be minimum of 28 days old. The joint must be clean and sound. All oil, dirt, debris, paint and any other foreign material must be removed. The final step in cleaning should be the complete removal of all residue by solvent wiping the joint. Substrates must be dry at time of application. Wet or damp joints will cause bubbling of the sealant.

**Priming: EUCOLASTIC PRIMER** is required to prime the joint facing when the product will be used on nonporous surfaces (metal, granite, etc.) or when the sealant will be underwater. See **EUCOLASTIC PRIMER** technical data sheet for use instructions.

**Mixing: EUCOLASTIC 1NS** is a single-component sealant and requires no pre-blending. It should be used directly from the cartridge.

**Placement:** Ensure that all the necessary preparation work is completed. Place backer rod or bond breaker tape into the joints and make sure they are secured in place. Using standard caulking guns, dispense the sealant directly from the cartridge into the joint. Once the joint is full, tool the sealant using a rounded spatula to create a concave surface. The concave shape will help the sealant stretch properly as the joint moves. Tooling will also put a little pressure on the sealant to aid with initial adhesion.

**Curing: EUCOLASTIC 1NS** requires no special curing. The moisture in the air and substrate will cure the sealant. A skin forms on the surface in about 1 hour at 24°C and 50% relative humidity. It will be tack-free in 3-4 hours. **EUCOLASTIC 1NS** cures at rate of about 1.6 mm per day. The cure time will increase or decrease as temperatures and humidity levels fluctuate.

## CLEAN UP

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Tools, equipment and general clean-up can be done with xylene before the material dries. Removal of dried **EUCOLASTIC 1NS** can only be done by mechanical means.

## PRECAUTIONS / LIMITATIONS

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- Use only at temperatures above 4°C.
- Contact surfaces must be clean and dry.
- Do not use underneath a polyurethane deck coating unless the sealant has fully cured.
- In all cases, consult the Safety Data Sheet before use.

Rev: 09/01/17