Advanced One-Component Polyurethane Sealant

Int Polyurethane IChem Building solutions

ChemSeal PU®

Description

The **ChemSeal PU**® is a one component, gun grade non sag, moisture-cure polyurethane sealant. **ChemSeal PU**® is ideal for sealing most types of joints in construction structures and buildings with excellent weathering resistance and excellent adhesion to most building materials.

Key Features

- · Permanently flexible, excellent weatherability.
- · Paintable.
- Single component & convenient packing.
- · Excellent adhesion without priming.
- Highly resistant to sea water, diluted acids and alkalis.
- · Odourless.
- · UV resistant/ fast curing.
- · Low VOC.
- Easy to gun, Easy to tool.
- Cures to a tough, durable, elastic consistency with excellent cut and tear resistance.
- · Non-sticky after cure.

Uses

- Sealant is designed to seal concrete construction joints.
- To seal waterproof rivet seams and roof rails.
- · Sealing of dynamic structural cracks.
- Sealing Air conditioning equipment, flashing and gutters.
- Glazing joints of windows and door frames.



Application Instructions

- **Surface Preparation:** Surface preparation is the most important step before applying any type of adhesive and/or sealant to get best results and to avoid adhesion failure.
- The surface to receive **ChemSeal PU**® must be dry, free from dust, coatings, bituminous mastics, concrete curing agents, mold release agents, oils, greases and loose particles. for expansion joints avoid weak building materials such as cement mortar, aerated concrete or rigid foam.
- Clean the joint surface by wire brush and sanding with emery paper if needed in order to remove all traces of release agents, or curing compounds.
- Remove dust by compressed air or paint brush.
- Wipe out oil and grease by solvent soaked cloth such as Xylene, Toluene or Acetone.
- **Application:** Proper joint profile is 2:1 width to depth ratio with minimum joint depth of 8 mm and maximum width of 50 mm. For 10 mm wide joints proper width to depth ratio is 1:1.
- Insert compressible polyethylene rod as backup material to control depth of sealant in the joint and to provide support for tooling of the sealant.
- Apply tape to both edges of the joint.
- Tool sealant to ensure full contact with joint walls and remove air entrapment. For best results in tooling the sealant, use a spatula and liquid soap diluted 1:10 with water (for smoothing). Avoid contact with alcohol and other solvents during cure period (7 days).

Advanced One-Component Polyurethane Sealant



ChemSeal PU®

Technical Properties	
Specific Gravity	1.24 - 1.30 g/ml @ 25°C (ASTM D1475)
Tensile Strength	>0.6 N/mm2 (ASTM D412)
Elongation at break	>150 % (ASTM D412)
Hardness: Shore A	27 - 33 (ASTM D2240)
VOC	<25 g/L (USEPA Method 24)
Flow	Non-Sag (ASTM C639)
Skin Over Time	10 - 35 @ 25°C, Minutes
Application Temperature	+5 to + 40 °C
Service Temperature	-20 to +80 °C
Color	White, Beige, Grey, and Black

Standards

ASTM C 920, Type S, Grade NS, Class 25. ISO 22196 (Anti-bacterial).

Packaging

- 600ml sausage.
- 5&10kg pails.

Advanced One-Component Polyurethane Sealant



ChemSeal PU®

Shelf Life

Shelf life is up to 12 months when stored as per recommendations.

Warehouse Conditions

ChemSeal PU[®] store in normal temperature and closed shaded dry area in undamaged original packing.

Quality, Health And Safety

All products manufactured by **iChem**[®], or imported from **iChem**[®] affiliate companies worldwide, are manufactured to procedures certified to conform to the quality, environment, health & safety management systems.

Technical Support

For any technical support, please contact **iChem**® technical office or representatives.

Technical Data Sheet - January 2025, Version 1.2.2



