



Product Data Sheet

ASMACO PU 90

One Component Polyurethane Sealant

Description: ASMACO PU 90 is a single-component, polyurethane sealant that undergoes curing upon exposure to atmospheric humidity. This sealant is designed to provide flexible and durable sealing solutions for a variety of applications. ASMACO PU 90 offers reliable performance in indoor and outdoor environments, effectively sealing joints and providing weatherproofing against environmental elements.



STANDARDS

ASMACO PU 90 complies with the requirements of:
ISO 11600 F 25 LM,
ASTM C-920, ASTM C 719 - Type S,
Grade NS Class 25 Use NT, M.A

AREAS OF APPLICATION

- Joints between prefabricated construction materials.
- Sealing and bonding ventilation ducts, gutters, and spouts.
- Sealing joints between pre-cast concrete panels.
- Concealing GRC & GRP lining joints.
- Expansion joints between various construction materials.
- Movement and construction joints in floors.
- Indoor and outdoor applications for pedestrian traffic areas

KEY PERFORMANCE PROPERTIES

Tough, Flexible, Elastomeric Seal: Polyurethane sealants form a durable, flexible, and elastomeric seal that can withstand various stresses and movements without compromising its integrity.

Excellent Resistance to Deterioration: are known for their resistance to weathering, ozone, UV light,

Durable Water and Weatherproof Sealing: maintain their sealing effectiveness even in joints subjected to high levels of deformation or repeated movement, providing reliable waterproofing and weatherproofing.

Excellent Adhesion: adhere well to a wide range of substrates including concrete, brickwork, metal, tiling, masonry, stone, steel, and glass, often without the need for primers.

Primer-Free Application: can be applied directly onto dry concrete without the need for primers,

Single Component, Easy Application typically available as single-component products and are easy to apply using standard caulking guns.

Non-Shrink, Non-Sag: maintain their shape and integrity after application, even in vertical applications,

Can Be Over Painted: Polyurethane sealants applied on substrates like concrete or blockwork can often be painted over after curing,

Smooth Surface Finish: sealants form smooth, blister-free surfaces when applied onto dry substrates,

Variety of Colors: available in different colors,

METHOD OF APPLICATION

Joint Preparation:

To ensure optimum adhesion the joint faces must be sound, clean dry and free from any loosely adherent materials which could prevent adequate bond to the substrate. Sealant shall be applied as per the following general method of application:

Masking: Apply masking tape on both side of the joint surface, apply sealant evenly, remove the tape while the sealant is still tacky.

Joint Configuration: width: depth ratio should be 2:1

Backer Rod: Use a high density polyethylene backer rod as a backup material always to adjust the joint width – depth ratio.

Adherent: Sealants should adhere to only two surfaces of the joint to take care of thermal expansion and contraction of the joint.

For horizontal trafficable joints, it is recommended to apply the sealant to a level at least 1.5 – 3.0 mm below the adjoining surfaces to avoid the wheels of the vehicles picking the sealant.

Rev 03, TDS_ASMACO PU 90, GCC 0524



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PACKAGING / SUPPLYING

ASMACO PU 90 is available in 600 ml Sausage

COVERAGE RATE

The approximate linear meter sealant consumption per liter can be estimated from the following formula:

$$\frac{W \times D}{1000}$$

= Sealant Consumption per linear meter per liter.

Where: W = Joint Width (mm), D = Joint Depth (mm)

Joint Size in mm	Liters/meter Run	600 ml / Sausage meter run
4 x 4	0.016	37.5
6 x 6	0.036	16.60
12 x 10	0.120	5.00
20 x 10	0.200	3.00
25 x 12	0.300	2.00
30 x 15	0.450	1.33
35 x 15	0.525	1.14

STORAGE & SHELF LIFE

ASMACO PU 90 Store in cool place under cover, out of direct sunlight and protect from extreme temperatures. In tropical climate the product must be stored in air – conditioned environment (<25° C). The shelf life is up to 12 months in unopened conditions if stored as per guidelines.

HEALTH & SAFETY

Protective clothing such as gloves and goggles should be worn while applying ASMACO PU 90. In case the material splashes to the skin or eyes wash the same with fresh water immediately.

In critical cases seek medical assistance.

Joint depth:

For non-immersed expansion joints, subject to cyclic movement, and greater than 20mm wide, it is important that the depth should not exceed half the width to optimize the elastomeric properties of the joint sealant, When using filler boards in expansion joints to achieve the correct depth, it is essential to use a backer rod or insert a bond breaking tape into the joint in order to prevent 3-point adhesion.

Applications:

ASMACO PU 90 is formulated to be applied using a sealant. Sealant guns are fitted with conical nozzles which can be cut to suit the joint width. Apply masking tape on both side of the joint surface. The sealant should be gunned into the joint using an even trigger pressure, cleaning the nozzle occasionally to avoid contamination. Deep joints should be filled in two or more runs, to prevent air entrapment. When applying the sealant to a vertical joint, start application at the bottom of the joint so as to continuously support the sealant. Remove the tape while the sealant is still tacky.

Finishing

In order to displace any air bubbles present in the sealant. It is advisable, immediately after the ASMACO PU 90 has been applied, to finish by tooling with a rounded spatula or similar object. The outermost surface of the sealant should be finished with a slightly concave profile. On no account must moistened fingers be used.

CLEAN UP

Clean equipment immediately with ANCHOR CLEANER 1 after usage.

QUALITY & CARE

All products originating from ANCHOR ALLIED FACTORY LLC Sharjah, UAE. facility is manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, and ISO 14001.

* Properties listed are based on laboratory-controlled tests.



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TECHNICAL SPECIFICATION

PROPERTIES	TYPICAL VALUES	TEST STANDARDS
Color	Beige , Grey, White	—
Consistency	Smooth Paste	—
Solid Content	93 % ±1	—
Curing rate	> 2 mm/day (23°C and 50% R.H)	—
Service Temperature	- 20°C — +80°C	—
Application Temperature	+5°C — +40°C	—
Skin Over Time	30 — 60 min (23°C and 50% R.H)	—
Flow Rate	350 – 450 gms@25°C ± 2°C	—
Paint Ability	Yes	—
Weathering UV Resistance	250 hours	—
VOC	31 g/L	USEPA - 24
TVOC	<0.01 mg/m ³	CDPH
Density, g/m ³	1.50 ±0.02	ASTM D 1475
Skin Over Time	60 min (+23° C 50% (R.H)	ASTM C 920 -18 / ASTM C 679 - 15
MAF	± 25%	ASTM C 719
Hardness Shore A	~ 40	ASTM D 2240
Elongation at Break	≥ 200 %	ASTM D 412
E 100 Modulus	~ 0.40 N/mm ²	ASTM D 412
Tensile Strength	≥1.40 N/mm ²	ASTM D 412

Shipping Limitations: None

Note

The information and data contained in the product data sheet is believed to be accurate and reliable; however, it is the user's responsibility to determine suitability of the product for usage. Since the supplier cannot know all the uses, or the conditions of use to which the product may be exposed, no warranties concerning the fitness or suitability for particular use or purpose are made. It is the user's responsibility to thoroughly test any proposed use of our products and independently conclude satisfactory performance in the application. Likewise if the application, product specifications or manner in which our products are used require government approval or clearance, it is the sole responsibility of the user to obtain sure authorization.

Non – Warranty : Because the storage, handling and application of the material is beyond Anchor Allied Factory Ltd's control, we can accept no liability for the result obtained. Anchor Allied Factory Ltd's sole limited warranty is the product meets the manufacturing specifications in effect at the time of shipment. There is no warranty or merchantability or fitness for use, nor any expressed or implied warranty. Anchor Allied Factory Ltd will not be liable for any incidental and consequential damage of any kind. The exclusive remedy for breach of such limited warranty is a replacement of any product shown to be other than warranted. Suggestions of uses should not be taken as inducement to infringe any patents.

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MFG. OF SILICONE , ACRYLIC & POLYURETHANE SEALANTS, WATER PROOFING COATINGS,
SELF - ADHESIVE TAPES, SPRAY PAINTS, CONTACT ADHESIVE, PVC CEMENTS, EPOXY STEEL

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