TECHNICAL DATASHEET
Sept 2023

Rev : 01



TRITOSIL H60 PU

DESCRIPTION

Tritosil H60 PU is a one-component, low modulus, gun-grade, moisture-cure, advanced polyurethane sealant designed to skin and cure rapidly. This high-performance product is designed with outstanding UV resistance and long-term durability.

USES

- Sealing joints in building construction such as movement, expansion, and construction/isolation joints, masonry joints.
- To seal waterproof rivet seams and roof rails.
- To seal perimeter joints around windows and doors, facades, claddings, etc. in concrete, brick, wood, metal, and PVC sections and structures, etc.
- Sealing corner moldings, fabricated roof-lap seams.
- Weatherproofing of joints between brickwork, blockwork, masonry, wood, prefabricated concrete joints, and concrete or metal frames.
- Bonds to concrete, masonry, brick, GRP, GRC, aluminum, wood, and many more substrates.

FEATURES

- Paintable
- Movement accommodation factor ± 50%
- Low VOC <30 g/l.
- Excellent adhesion without priming.
- Highly resistant to seawater, diluted acids, and alkalis.
- UV resistant / fast curing

ADVANTAGES

- Permanently flexible, excellent weatherability.
- Easy to gun, easy to tool.
- Cures to a tough, durable, elastic consistency with excellent cut and tear resistance.
- Non-sticky after cure.

TECHNICAL SPECIFICATION

Physical Properties	Test Method	Typical Value	
Specific Gravity @ 25°c, g/ml	ASTM D 1475	1.42±0.02	
Skin over time @ @25°c, Minutes	-	25 – 35	
Curing rate @ 25°C, mm/24 hrs.		>2	
Flow (sag or slump)	ASTM C 639	Non-Sag	
Tensile Strength (N/mm²)	ASTM D 412	1 - 1.3	
Elongation at break, %	ASTM D 412	600-800	
Hardness: Shore A	ASTM D 2240	20 - 30	
Movement Capability, %	ASTM C 719	± 50	
Effects of Accelerated Ageing @ 300 hrs. UV exposure	ASTM C 793	No deterioration	
Application Temperature (°C)		+5 to +40	
Substrate temperature(°C)		-20 to +80	
Composition	-	Silane Terminated Polyurethane	

STANDARDS

Tritosil H60 PU meets or exceeds the requirements of the following specifications: ASTM C920 Type S, Grade NS, Class 50.

PACKAGING

600ml sausage, 20 Nos per carton.

COLOUR

White, Off-white, Grey, and Black. For other colours please contact the local Triton representative.

JOINT BACKING

Closed cell polyethylene backer rod is recommended as joint backing to control sealant depth and to ensure intimate contact of sealant with joint walls when tooling. Where the depth of joint is insufficient for the use of a backer rod, an adhesive-backed polyethylene tape (bond breaker tape) should be used to prevent three-sided adhesion. All backing should be dry at the time of sealant application. Use of sharp tools is not advised.

EXPANSION JOINT DESIGN

Tritosil H60 PU may be used in any joint designed in accordance with accepted architectural/engineering practices. Joint width should be at least 4 times the anticipated movement, and not less than (5mm). While applied on an expansion joint the depth (D) of the sealant should be equal to the width (W) of the joints that are less than 10mm wide. For wider joints, the width to depth ratio should be 2:1.

The maximum width of the joint on which Tritosil H60 PU can be applied is 25mm.

YIELD

The following formula is an approximate guideline to calculate foreseen yield for a standard 600ml sausage of Tritosil H60 PU.

 $L = 600 / (W \times D)$

Where:

L = Length of sealant in meters obtained per sausage in m

D = Depth of the joint in mm

W = Width of the joint in mm

Consumption (Meter per 600ml)

Joint Width (mm)	10	12	15	20	25
Joint Depth (mm)	6	8	8	10	12
Joint Length (m)/600ml	10	6.25	5	3	2

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Surfaces must be sound, clean, and dry. All release agents, dust, loose mortar, laitance, paints, or other loose particles must be removed. This can be accomplished with thorough wire brushing, sanding, or solvent washing, depending on the contamination. Triton recommends that surface temperatures be below 40°C at the time the sealant is applied.

APPLICATION

Tritosil H60 PU is easy to apply with conventional caulking equipment. Ensure that the backer rod is friction fitted properly. Mask the sides of the joint with masking tape prior to filling for a cleaner finish. Fill the joint completely with a proper width-to-depth ratio and tool to ensure intimate contact of sealant with joint walls. Dry tooling is always preferred, although xylene can be used in limited amounts to slick the spatula if needed following the initial dry tooling.

PRIMING

Tritosil H60 PU typically adheres to common construction substrates without primers; however, mockup or field adhesion test can be performed on the actual materials being used on the job to verify the properties.

FOR OPTIMUM PERFORMANCE

In cool or cold weather, store the container at room temperature for at least 24 hours before use.

- Tritosil H60 PU can adhere to other residual sealants in restoration applications. For best results always clean the joint as advised in the Surface Preparation section of this data guide. A product field adhesion test for Tritosil H60 PU within the specific application is always recommended to confirm the adhesion and suitability of the application.
- Pursuant to accepted industry standards and practices, using rigid paints and/or coatings over flexible sealants can result in a loss of adhesion of the applied paint and/or coating, due to the potential movement of the sealant, however, should painting and/or coating be desired it is required that the applicator of the paint and/or coating conduct on-site testing to determine compatibility and adhesion.
- Proper application is the responsibility of the user. Field visits by Triton personnel are to make technical recommendations only and not for supervising or providing quality control on the Jobsite.

CLEAN UP

Excess sealant and smears adjacent to the joint interface can be carefully removed with xylene or mineral spirits before the sealant cures. Any utensils used for tooling can also be cleaned with xylene or mineral spirits.

LIMITATIONS

- Do not apply over damp or contaminated surfaces.
- Do not use Tritosil H60 PU as a structural (load transferring) sealant.

STORAGE AND SHELF LIFE

Tritosil H60 PU has a shelf life of 12 months when stored in tightly closed original casks, in a dry place at a temperature between +5°C and +25°C.

CURING TIME

Tritosil H60 PU generally cures at a rate of 2mm per day at 25°C and 50% relative humidity. Lower temperatures and humidity will extend curing time.

HEALTH AND SAFETY

Use only with adequate ventilation. Prevent contact with skin, eyes, and clothing. Wash thoroughly after handling. Avoid breathing vapors. DO NOT take internally. Use impervious gloves, and eye protection if the TLV is exceeded or used in a poorly ventilated area. Always utilize the accompanying SDS for information on Personal Protective Equipment (PPE) and Health Hazards.

Note:

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control. Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields. Information on this datasheet is subject to change without notice and should not be used for writing specification. For additional information on specific applications, please contact Triton Middle East, LLC. The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet, or any verbal advice given, unless there is a case of willful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product. Triton reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned copies of which will be supplied on request.

Product of:



Factory address TRITON Middle East LLC

P. O. Box 3350, Umm Al Quwain, U. A. E.

Tel.: + 971 6 767 23 27 Fax.: + 971 6 767 23 28 E-mail: info@triton.me Web.: www.triton.me