

TRU PU

Waterproofing Membrane

ASTRAL

TRUBUILD™

TECHNICAL DATA SHEET VER NO. N.1

TRU PU is water-based, single-component, bitumen-modified, liquid applied, polyurethane waterproofing membrane. It comes with excellent waterproofing properties, excellent elongation and good hydrostatic pressure resistance. Tru PU is single-component, hence easy to apply.

FEATURES & ADVANTAGES



**EXCELLENT
ELONGATION**



**EXCELLENT
WATERPROOFING**



**BEST IN CLASS
CRACK BRIDGING
ABILITY**



**EXCELLENT
HYDROSTATIC
PRESSURE RESISTANCE**

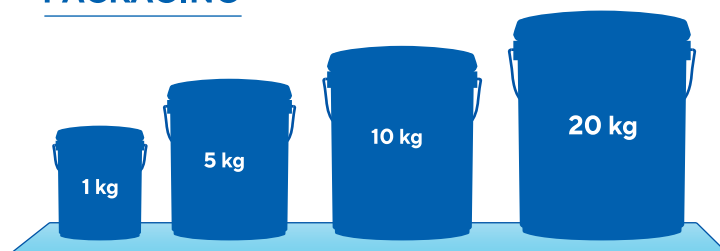
- TRU PU is a single-component, liquid applied system and very easy to apply
- High elasticity ensures a permanently flexible barrier over a wide range of temperatures
- Outstanding resistance to oxidation and brittleness
- Gives better adhesion. Can be applied to a range of substrates
- Good crack bridging capacity up to 2 mm
- Good retention capacity

AREAS OF APPLICATION



Waterproofing of wet areas, foundation, basements, terraces, retaining walls and podium, etc.

PACKAGING



METHOD OF APPLICATION

- Clean the surface by manual & mechanical means. Remove all the loose materials or previous work done make it free from any type of contaminants like oil, sand, debris, etc.
- Prime the surface with max. 20% water adding to Tru PU. Mix it till it becomes homogeneous, then apply by brush or roller to the surface. The coverage will be approx. 80-90 sq ft per kg. The coverage will depend on the substrate conditions.
- Tru PU should be applied undiluted directly by brush to obtain a continuous film.
- After self-priming, two more coats are required, wherein the second coat should be applied perpendicular to the first coat at an interval of 6-8 hrs. (Humidity present in the atmosphere may increase the time interval).
- It must be protected from mechanical damage during construction or backfilling.

- Any damage may be repaired by spot application
- If a water flood test is to be run, the membrane should be cured for a minimum of 10 days.
- Tru PU is resistant to frost but adhesion will be weak if it is applied to frosted substrates/surfaces.
- Application should be avoided if substrate temperatures are below 5°C or rain forecast. For any further technical information required please contact the Trubuild technical services department.

TECHNICAL PROPERTIES

S.NO.	PROPERTIES	STANDARD	RESULTS
1.	Appearance	In house	Viscous Liquid
2.	Colour	In House	Black after Drying
3.	Density@25°C	ASTM D 1475-2013	1.07±0.02 g/cm ³
4.	Cure Time	In House	24 hour approx.
5.	Tensile strength at Break	ASTM D 412	>1.5 N/mm ²
6.	Elongation at break	ASTM D 412	≥ 600%
7.	Water Permeability @ 5 Bar	EN 12390-8:2019	Nil
8.	Pull off Adhesion Strength	ASTM D 7234:2022	> 1 N/mm ²
9.	Crack Bridging ability	EN 1062-7:2004	Approx. 2mm
10.	Shore A Hardness	ASTM D 2240:2015	Approx. 45
11.	WFT	In House	Approx. 1000-1200 micron
12.	DFT	In House	Approx. 500-600 micron

LIMITATIONS

- For priming, the product should be diluted with water (20% maximum by weight, i.e. 4 kg of water for 20 kg of TRU PU on site to achieve a workable consistency).
- Water ponding test shall be done only once the coating is fully cured for 10 days.
- After full cure, this product will be slightly tacky, hence it is recommended to use a separation layer such as geotextile or PE sheet, then cover with a protection screed.
- Out gassing is a naturally occurring phenomenon of concrete that can produce pinholes in subsequently applied coatings. The concrete must be carefully assessed for moisture content, air entrapment, and surface finish prior to any coating work. Installing the coating either when the concrete temperature is falling or stable can reduce outgassing. It is generally beneficial, therefore, to apply the embedment coat in the late afternoon or evening.
- For optimum application, do not allow TRU PU liquid to be heated by direct sunlight or other heat sources.
- Not suitable for permanent water immersion, hence not recommended for water-retaining structures such as RC tanks, swimming pools, water features, etc.
- The 1st coat and 2nd coat of TRU PU should be applied without any dilution
- During the curing process, micro bubbles are formed. This is a product characteristic, which does not affect the protective properties. For this reason, it should be ensured that the material is not applied at excessive film thicknesses in one layer as excessive film thickness may create bubbles.
- The product can be applied by brush, roller or airless spray. Work well with a brush in difficult areas. Apply subsequent layers 24 hrs after the application of first layer.
- If TRU PU has been exposed to UV light, its colour will be changed to yellow slightly-without losing its physical properties but flow is possible due to temperature of sun light in open to sky condition.
- It is recommended to use a reinforced coating system with 45 gsm fleece or fibre net specially on the joints/corners etc to increase its tensile property, however, the performance of the standard coating system is also excellent
- A screed needs to be laid on the finished system.
- Avoid coating in afternoon as it may lead to bubble formation.
- RCC should be fully cured and in a sound condition.

CLEANING

Use tap water for cleaning tools & tackles.

HANDLING PRECAUTIONS

Mandatory and recommended industrial hygiene procedures should be followed whenever our products are being handled and processed. For additional information please refer MSDS.

STORAGE

- Product should be stored in a dry place in its original, properly closed
- container at temperatures between 2-40°C.
- Partially emptied container should be closed immediately.

COVERAGE

- 1.1-1.2 kg/m² / 2 coats (minimum 2 coats recommended)
- Coverage depends on the type of substrate and its porosity.

SHELF LIFE

24 months from the date of manufacturing

DISCLAIMER: This technical data sheet replaces all previous versions of it from the immediate effect. The information, and, in particular, the recommendations relating to the application and end-use of Astral Ltd, construction chemical products, are given in good faith based on our knowledge and experience of the products when properly stored, handled and applied under suitable favourable conditions in accordance with application instructions recommended in product technical data sheet. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. For the products on which company is offering warranty, please refer to warranty document to know entire terms and conditions. The same can be availed on request or from company website. The values mentioned in the above tables in technical data sheet are obtained in controlled lab conditions when tested properly by competent laboratory. Tolerance up to five to ten percentage on the lower side from the above values are allowable. Astral Ltd. reserves the right to change the properties of its products without notice. The end user of the product must test the product's suitability for the intended application and purpose. Astral Ltd will not bear any responsibilities on the product failure if it is wrongly positioned or if improper application methodology is adopted by the user or the applicator. 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 technical data sheet for the product concerned, copies of which will be supplied on request. No freedom from any patent owned by Seller or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, customer is responsible for determining whether products and the information in this document are appropriate for the customer's use and for ensuring that the customer's workplace, and disposal practices are in compliance with applicable laws and other governmental enactments.