# **Technical data sheet**



# **Bauder LiquiTOP PU**

V5 26.01.2024

**Product description** 

LiquiTOP PU is a single component, moisture triggered polyurethane, cold applied liquid waterproofing resin, for use in LiquiTOP Roof Systems. It is applied by roller and is fully reinforced with Bauder LiquiTOP Glass Fibre Mat. The moisture triggered technology utilises atmospheric and substrate moisture to initiate the curing mechanism forming a fully cross linked polymeric waterproofing membrane.

Application fields

LiquiTOP PU is used as the waterproofing of the Bauder LiquiTOP Roof Systems. It is suitable for use in cold roof and warm roof situations. It is compatible with a variety of roof surfaces, including asphalt, bituminous felt, PVC single ply, concrete and metals.



**Article Number** 

GB81008200 – LiquiTOP PU Dark Grey GB81008210 – LiquiTOP PU Mist Grey

Characteristic	Unit	Value
Gross Weight	kg	23.39
Net weight	kg	22.2
Content Volume	litre	15
Colour		Mist Grey (approx. RAL 7040)
		Dark Grey (approx. RAL 7011)
Base		Polyurethane
Solid Content by mass by volume	%	88 83
Coverage as a fully reinforced system (dependant on roughness and porosity of substrate)	litre/m²	Dependant on system specified  See Bauder project specification and BBA Certificate
Shelf life unopened	months	12
Ambient and substrate temperature	°C	5 to +30 (Where the temperature falls outside of this, please refer to Summer & Winter Advice documents from Bauder).
Atmospheric relative humidity	%	≤ 95
Substrate moisture	%	<28% WME (Wood Moisture Equivalent) 5% moisture content for concrete
Dew point	°C	3° above dew point
Curing time*  at 20°C  at 10°C  at 5°C  Rainproof  Overcoat / traffic time	hours	6-12 approx. 12-18 approx. 18-24 approx. 1 Minimum 6
		Maximum 5 days, after this period the surface will need to be reactivated. Avoid intercoat contamination.

# **Technical data sheet**



\*Times will be slightly increased at lower temperatures and slightly reduced at higher temperatures. Temperature in service -30 to +80 °C Fire performancet DD CEN/TS 1187: B<sub>ROOF</sub>(t4) **Tested Flat** 2012 (test 4)/EN A 18 mm thick orientated strand board (OSB) 13501-5 : 2010 substrate, a 1.5 mm thick carrier membrane (self-adhesive, foil-faced, modified bitumen), a layer of Bauder LiquiTOP PU applied at 1.0 litre/m² with 225 gsm glass fibre mat embedded and Bauder LiquiTOP PU applied at 1.0 litre/m² A 18 mm thick OSB substrate, 1.5 mm thick air and vapour control layer (AVCL) (self-adhesive, foil-faced, modified bitumen), a bonded 60 mm thick foil-faced polyisocyanurate (PIR) insulation board, a 1.5 mm thick carrier membrane (selfadhesive, foil-faced, modified bitumen), a layer of Bauder LiquiTOP PU applied at 1.0 litre/m<sup>2</sup> with 225 gsm glass fibre mat embedded and Bauder LiquiTOP PU applied at 1.0 litre/m² A 18 mm thick OSB substrate, 1.5 mm thick AVCL (self-adhesive, foil-faced, modified bitumen), a bonded 240 mm thick foil-faced PIR insulation board, a 1.5 mm thick carrier membrane (self-adhesive, foil-faced, modified bitumen), a layer of Bauder LiquiTOP PU applied at 1.0 litre/m² with 225 gsm glass fibre mat embedded and Bauder LiquiTOP PU applied at 1.0 litre/m<sup>2</sup> Tested on a Slope A 18 mm thick OSB substrate, a 1.5 mm thick carrier membrane (self-adhesive, foil-faced, modified bitumen), a layer of Bauder LiquiTOP PU applied at 1.0 litre/m² with 225 gsm glass fibre mat embedded and Bauder LiquiTOP PU applied at 1.0 litre/m<sup>2</sup> A 18 mm thick OSB substrate, 1.5 mm thick AVCL (self-adhesive, foil-faced, modified bitumen), a bonded 60 mm thick foil-faced PIR insulation board, a 1.5 mm thick carrier membrane (self-adhesive, foil-faced, modified bitumen), a layer of Bauder LiquiTOP PU applied at 1.0 litre/m² with 225 gsm glass fibre mat embedded and Bauder LiquiTOP PU applied at 1.0 litre/m² A mm thick OSB substrate, 1.5 mm thick AVCL (self-adhesive, foil-faced, modified bitumen), a bonded 240 mm thick foil-faced PIR insulation board, a 1.5 mm thick carrier membrane (self-adhesive, foil-faced, modified bitumen), a layer of Bauder LiquiTOP PU applied at 1.0 litre/m² with 225 gsm glass fibre mat embedded and Bauder LiquiTOP PU applied at 1.0 litre/m² 13501-1 Euroclass E Reaction to Fire \*Bauder are always testing various system combinations, please consult Technical Services or the BBA Certificate for the most up to date information.

Should be stored unexpending a dry condition at a temporature of 5.75°C. When manufactured

Storage guidance Should be stored unopened in a dry condition at a temperature of 5-25°C. When manufactured, the product is

protected with a layer of nitrogen prior to despatch. This ensures a storage life of twelve months, provided that the container is left unopened in a dry condition at a temperature of 5-25°C. The layer of nitrogen will disappear and the product will have a limited life once the container is opened. It is also important to note that carbon dioxide will be

given off if water enters the container, which can cause pressurisation.

Packaging material The product is packaged in tin plate steel pails with a tin plate steel lug lid.

Weight of packaging approximately 1.8kg.

Handling/PPE

All persons using the product should be fully aware of the manual handling methods as roofing materials are

heavy and can cause serious injury. When using the product, installers should be provided with, and wear,

techniques.

suitable personal protective equipment.

suitability and compliance with applicable guidance, regulations, legislations, project requirements, specifications, and installation

# Technical data sheet



Emptying and disposal guidance Containers which have been emptied, but not washed out in line

with the specific methods and calculations prescribed in WP1 and WM3, should be classified as packaging containing residues of/or contaminated by hazardous substances using waste code 15-01-10. Containers with hazardous residues that have been emptied and washed-out in line with the method and calculations which are detailed in the industry guidance can be classified as non-hazardous waste

packaging.

www.bauder.co.uk

Certification and environmental information BBA Certificate 20/5789

Environmental Product Declaration EPD-FEI-20180092-IBG1-EN

International Standards Organisation (ISO)

ISO 9001:2015 Quality Management
Certificates EN1271 and FM 01892

ISO 14001:2015 Environmental Management Certificates A10552 and EMS 59737

### Installation Guidance

Installation is to be carried out by Bauder Approved Contractors in accordance with the specification and guidelines. Please consult the Bauder Technical Department.

### Substrate assessment / pre-treatment / preparation

Ensure that the substrate is clean, dry and free from dust, laitance, grease, oil and any other contamination, including surface applied curing membranes or treatments. The substrate must be assessed, treated and prepared in accordance with the Bauder project specification.

#### Initial mixing

Mixing is not required, however if the product is settled or separated on opening, stir gently but thoroughly in order to achieve a uniform colour.

#### Installation

Apply by roller to the substrate. Brushes may be used for small detail areas. For full details refer to the Bauder project specification.

## Waterproofing Membrane

Apply a first/embedment coat of Bauder LiquiTOP PU with a roller or brush at a minimum rate of 1 litre/m². Rough or absorbent substrates may require more material. Always apply to details prior to waterproofing horizontal surfaces

Whilst wet, reinforce by inserting the Bauder LiquiTOP Glass Fibre Mat, ensuring there are no creases. The glass-fibre mat breaks down into individual fibres when embedded with Bauder LiquiTOP PU, which mitigates the risk of creasing. Overlap the glass-fibre mat a minimum of 50mm on itself to ensure consistent reinforcement of the coating. For best results, allow the first coat to cure overnight and ensure surfaces ready for coating are clean, dry and free from any other contaminants. Remove any extra dust to avoid any intercoat contamination before applying the subsequent top coat(s) of Bauder LiquiTOP PU in the alternate colour dependant on the specified system.

For the LiquiTOP System, apply one top coat at a minimum 1 litre/m².

For the LiquiTOP 3COAT System, apply two top coats at 0.75 litre/m² each, allowing the intermediate coat to cure before applying the final top coat.

Either colour may be used as the embedment or top coat, but it is our suggestion that Dark Grey is used for the top coat.

## **Optional Maintenance Walkway Wearing Course**

For areas where pedestrian access is required for maintenance purposes, a heavy duty wearing course can be applied as follows:

Apply a minimum 0.25 litre/m² of LiquiTOP PU to the designated areas and broadcast Bauder Quartz (0.4 - 1.2mm or 0.3 – 0.6mm) at a minimum 0.25 kg/m² or as required to meet specific purposes. Once cured, brush off loose quartz and dispose. If desired, apply a finish/seal coat of LiquiTOP PU to the quartz course at a minimum rate of 0.25 litre/m².

Note: Consumption rates are based on smooth, even, non-absorbent substrates.

Safety Data Sheets are designed to provide the necessary information to recipients of substances and mixtures in the EU & UK. This product is classed as a substance/mixture; therefore, this product does have a requirement for a Safety Data Sheet.





enaing

Bauder reserves the right to update this data set without prior notice and this document is uncontrolled if printed or stored. Always confirm the latest version is used for the adoption of this product, available from our website: bauder.co.uk/technical-centre.

Intended use of this product should be verified with Bauder to ensure suitability and compliance with applicable guidance, regulations, legislations, project requirements, specifications, and installation techniques.

LiquiTOP System



# **LiquiTOP 3COAT System**