



IMPERVIOUS WATERPROOFING®

TECHNICAL DATA SHEET

IMPETHANE® POLYFLEX

IMPETHANE® POLYFLEX is a water based, very fast drying, aliphatic polyurethane hybrid coating for waterproofing and protection.

IMPETHANE® POLYFLEX is easily applied on both vertical and horizontal substrates and forms a seamless, elastic and hydrophobic membrane. Apply the product with a brush, roller or airless spraying in two or more coats.

APPLICATION

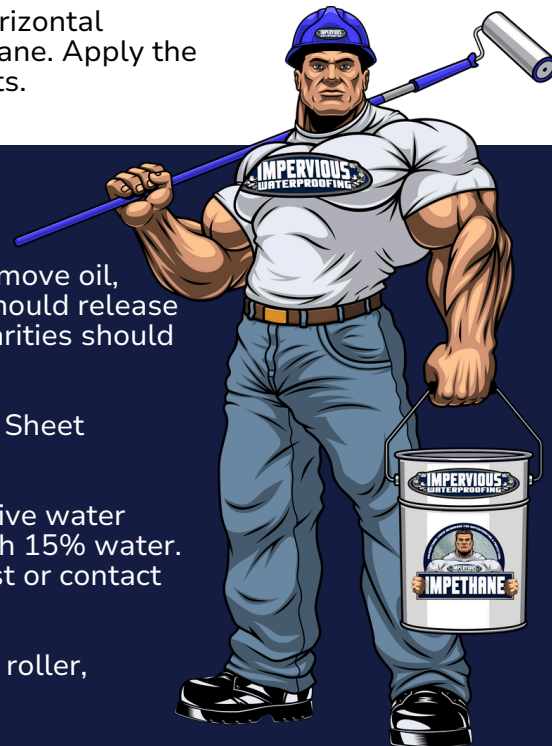
Clean the substrate using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must also be removed. Surface irregularities should also be filled.

Priming: Apply recommended primer according to Technical Data Sheet specifications.

For non-demanding applications (where standing water or negative water pressure is not an issue) prime with same material by diluting with 15% water. For more professional applications, apply primers as per above list or contact our technical department for further information.

Mixing: Use a low speed (300 rpm) mixer. Application: Apply with roller, brush or airless spraying in two or more coats.

(please see consumption table).



✓ FEATURES & BENEFITS

- Water based.
- Very fast drying.
- Easy to apply & repair.
- Thixotropic.
- Seamless.
- Elastic.
- Highly resistant to stagnating water (ensure proper adhesion-see suitable primers list).
- Water vapor transmission: The film breathes so there is no accumulation of humidity under the coat.
- Excellent weather and UV resistance. The white colour reflects much of the solar energy and so reduces the internal temperature of structures considerably.
- Easy colouring of product with almost any water based pigment paste available at hardware stores, subject to adequate tests.
- Compatible with all standard IMPERVIOUS® Primers.

RECOMMENDED FOR

Waterproofing and Protection of:

- PU foam,
- Roofs,
- Light roofing made of metal or fibrous cement,
- Under tile applications such as wet rooms,
- Protection of concrete/reinforced concrete from carbonization.

Can be successfully applied on: Concrete, fibrous cement, cement roof tiles, wood, galvanised steel, PU foam. For information about other substrates, please contact our tech department.

Standard concrete substrate conditions:

- Hardness: R28 = 15 Mpa.
- Humidity: W < 10%.
- Temperature: 5-35°C / 41- 95°F
- Relative humidity: < 85%.

LIMITATIONS

Not recommended for:

- Unsound substrates: (in some cases, application is possible with the use of geotextile reinforcement; please contact our technical department for consultations).

Do not apply under conditions of extreme wet weather or imminent rain or near freezing temperature.

MINIMUM CONSUMPTION RATES

 <p>APPLY WITH MINIMUM CONSUMPTION:</p> <p>CONTACT US</p>	 <p>APPLY WITH MINIMUM CONSUMPTION:</p> <p>FOR WATERPROOF COATING: 1.5 KG/M2 IN 2-3 COATS</p> <p>FOR WATERPROOF PAINT: 0.5 KG/M2 PER COAT</p>
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PACKAGING

 <p>CONTACT US</p>	 <p>• 12KG</p>
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TECHNICAL DATA

CLEANING: Clean tools and equipment immediately with water.

SHELF LIFE: Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25°C / 41-77°F. Once opened, use as soon as possible. Protect from freezing conditions.

STORAGE: The MSDS (Material Safety Data Sheet) is available on request.

In liquid form 70% Active Substance)

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity (Brookfield)	cP	ASTM D2196-86, @ 25°C	2000-5000
Specific weight	gr/cm3	ASTM D1475 / DIN 53217 / ISO 2811, @ 20°C	1.3
Required application temperature	°C	-	> 5

In cured form (after application):

PROPERTY	UNITS	METHOD	SPECIFICATION
Service temperature	°C	-	-20 to 90
Hardness	Shore A	ASTM D2240 / DIN 53505 / ISO R868	70
Tensile strength at break @ 23°C	Kg/cm2 (N/mm2)	ASTM D412 / EN-ISO-527-3	50 (5.0)
Elongation @ 23°C	%	ASTM D412 / EN-ISO-527-3	> 300
H2O absorption	%	-	< 5
QUV Accelerated Weathering Test (4hr UV, @ 60°C (UVB-Lamps) & 4hr COND 50°C)	-	ASTM G53	passed (2,000 hours)

CE: ETAG 005, Part 1 & Part 6 CPR-17/0922. Classification according to EOTA.

REQUIREMENT	PERFORMANCE	HARMONIZED TECHNICAL SPECIFICATION
Minimum thickness	1.6mm	ETAG 005 – part 6
Water vapour diffusion resistance factor (μ)	~890	ETAG 005 – part 6
Resistance to wind loads	>50KPa	ETAG 005 – part 6
Statement on dangerous substances	Does not contain any	ETAG 005 – part 6
External fire performance	NPD	ETAG 005 – part 6
Expected working life	W2 (10 Years)	ETAG 005 – part 6
Climatic zone of use	S (Severe)	ETAG 005 – part 6
User loads	P1 to P3 (P3 REINFORCED)	ETAG 005 – part 6
Roof slopes	S1 to S4	ETAG 005 – part 6
Minimum surface temperatures	TL3 (-20°C)	ETAG 005 – part 6
Maximum surface temperatures	TH4 (90°C)	ETAG 005 – part 6

Essential characteristics	Performance	Harmonized technical specification
CO ₂ permeability, m	$S_D > 50$	EN 1504-2:2004
Permeability to water vapor, m	$S_D < 5$ Class I	
Capillary absorption, kg/m ² ·h ^{0.5}	$w < 0.1$	
Adhesion strength by pull-off test, N/mm ²	≥ 1.5	
Abrasion resistance, mg	< 3000	
Impact resistance, N.m	≥ 4 Class I	
Reaction to fire	Euroclass F	

IMPERVIOUS WATERPROOFING®

WORLD-LEADING POLYURETHANE LIQUID WATERPROOFING

Visit our website to view product application guides and data sheets for our full range of products.

COMPANY DETAILS

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