

## PRODUCT DATA SHEET

# Decothane Clearglaze

### HIGH PERFORMANCE, CLEAR POLYURETHANE COATING

#### PRODUCT DESCRIPTION

Decothane Clearglaze is a clear aliphatic, polycarbonate polyurethane coating which forms an effective barrier to water penetration and the ingress of atmospheric chemicals.

#### USES

- Anti-shatter coating over glass and rooflights.

#### CHARACTERISTICS / ADVANTAGES

- High solids formulation
- Moisture triggered curing – does not foam when excess moisture is present
- “Wet look” finish when applied to porous surfaces
- Does not discolour with age or prolonged UV exposure

#### APPROVALS / STANDARDS

Resistance to fire - Class “O” rating on concrete surfaces BS 476 Part 6 and 7.

#### PRODUCT INFORMATION

Chemical Base	One-component moisture-triggered aliphatic, polycarbonate polyurethane.
Packaging	15 litres 5 litres
Appearance / Colour	Clear/Transparent
Shelf Life	A shelf-life of 12 months is achieved when stored in accordance with the above recommendations at a temperature of 20°C. Exposure to higher temperatures will reduce the shelf-life.
Storage Conditions	Store in original, unopened and undamaged sealed packaging in dry conditions at temperatures >0°C and < 25°C. Protect from frost. Reference should also be made to the storage recommendations of the material safety datasheet.
Density	1.20 (23°C)
Flash Point	40°C
Solid content by weight	~ 64.9 %
Solid content by volume	~ 59.5 %

#### TECHNICAL INFORMATION

Elongation at Break	290% (unreinforced)
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<b>Tensile Adhesion Strength</b>	~35.3 N/mm <sup>2</sup> (unreinforced).
<b>Chemical Resistance</b>	Resistant to standard 10% solutions of mineral acids, most alkalis, acid rain and detergents. Some oils and solvents may soften the surface. Salt spray to BS.3900 Part 4 and ASTM B117 - 500 hours. No rusting, blistering or delamination.
<b>Behaviour after Artificial Weathering</b>	QUV ASTM G53.77 – 5000 hours. No deterioration; clarity retained.
<b>Service Temperature</b>	-50 to +80°C. No change after 500 hours at 80°C other than slight discolouration.

## APPLICATION INFORMATION

Mixing Ratio	No mixing required.				
Consumption	The coverage rates for Decothane Clearglaze will depend on the intended function of the coating. Please consult technical services for details about specific applications. The following rates are for general guidance only.				
	First Coat	Decothane Clearglaze	0.5 l/m <sup>2</sup>		
	Top Coat	Decothane Clearglaze	0.5 l/m <sup>2</sup>		
Layer Thickness	300 microns	For general use			
	600 microns	For anti shatter applications			
Ambient Air Temperature	+2°C min/+35°C max. Note: when applying Decothane Clearglaze by spray equipment, the material must be kept above 10°C.				
Relative Air Humidity	20% min/85% max.				
Dew Point	Beware of condensation. Surface temperature during application and cure must be a minimum of 3°C above dew point.				
Substrate Temperature	+2°C min. / +60°C max.				
Substrate Moisture Content	Wood moisture equivalent (wme) (max): < 28%. Please note: Reference should also be made to the appropriate primer technical datasheet.				
Applied Product Ready for Use	Temperature	Relative Humidity	Rain Resistant	Touch Dry	Full Cure
	+2°C	50%	1 Hour	8-10 Hours	24 Hours
	+20°C	50%	1 Hour	6 - 7 Hours	8 Hours (Minimum)
	Note: Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.				

## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY / PRE-TREATMENT

#### General Preparation

Ensure surface is clean and sound prior to application of Decothane Clearglaze. Any areas contaminated with mould, algae, fungus or lichen must be cleaned off and the area treated with a suitable biocidal agent eg., Everbuild Fungicidal Solution or similar or prevent re-development. Use as directed and rinse surfaces thoroughly with clean water and allow to dry before coating. Moss must be physically removed and any residual material cleaned away and the area treated as described with biocidal agent.

#### Substrate Preparation

##### Bricks, Blockwork and Stone

Clay and cement bricks may be coated directly after preparation. Stonework which is clean and free from dirt and other contaminants may be treated directly.

##### Cementitious Materials

Concrete and screeds etc., must be a minimum of 10 days old before treatment. Please consult our Technical Services before applying to highly porous substrates. Adhesion tests should be carried out before overcoating repair mortars.

### Glass

Ensure surfaces are clean and degreased before application. Apply to plain and reinforced glass, leaded windows, glazing strips and rooflights, unless total optical clarity must be obtained.

There are potential supplementary finished to glazing that may not be detected. Always check adhesion quality before proceeding with application.

**Note:** To maximise surface adhesion, it is recommended that glass substrates are primed with a coat of Sika Atkivator Pro prior to the application of Decothane Clearglaze. Decothane Clearglaze may be lapped onto painted frames but it is not recommended for fully coating external painted surfaces since the paint may discolour and/or flake, resulting in delamination.

### Metals

Apply direct to most metals. Please seek advice from Sika Liquid Plastics' Technical Services department before coating ferrous metals.

### Plastics

Decothane Clearglaze is particularly suited for use over Sika Liquid Plastics' Decolight® where the coating protects against water ingress but permits the continued transmission of light into the building. Usual preparation procedures should be observed. Remove any oxidised layers and use localised reinforcement over joints.

**Note:** Any reinforcement incorporated within the membrane will be visible.

## **APPLICATION**

### **Application Instructions**

<b>Substrate</b>	<b>Primer</b>
Cementitious Substrates	Direct application
Brick and Stone	Direct application
Glass	Direct application
Slate, tiles etc	Direct application
Metals	Metal Primer (Note: primer will be visible)
Timber Substrates	Direct application
Existing Decothane	Sika Reactivation Primer (Note: Primer will be visible and may become dark with age)
New Decothane	Direct application

### Mixing

No mixing required

### Application Method

Once the relevant system has been selected, please refer to the above for details of coverage rates. Please note that the rates quoted are for smooth, sealed surfaces. Rough, porous, absorbent or undulating surfaces will inevitably increase the quantity of coating required, particularly at the embedment/first coat stage, to achieve the necessary film thickness and a pin-hole free finish.

Surface preparation for a clear coating must be thorough, particularly in relation to the removal of all organic growth. Always allow primers and any previous coat to dry/cure thoroughly before applying the following coat. Coatings will generally require curing overnight, although under optimal conditions (at higher temperatures and low relative humidity) work may often recommence sooner. Please consult our Technical Services Department for further details.

**Note 1:** Do not thin or brush out like conventional paints.

**Note 2:** When using brushes, the first coat should ideally be applied in one direction only, where possible, the second coat should be applied at right angles to the first.

### Application Tools

Application is primarily by brush or roller. Use only dry equipment free from water. Airless spray may be used but this must be followed by the use of a roller to de-aerate. Rollers should be pre-wetted with the coatings when used for this purpose.

**Rollers:** Good quality (non shed) medium pile sheep-skin roller. Use on flat or undulating but not rough surfaces. Apply in two coats, using light pressure, to bring up to the required coverage rate. Do not over-work. For applications in excess of 1.0 L/m<sup>2</sup> total coverage, three coats may be required to avoid slump.

**Brushes:** Always use a soft nylon or bristle brush. Apply in two coats. Apply second coat at right angles to the first wherever possible. Application limits per coat are the same as those quoted for roller applications.

**Airless Spray:** Up to 0.5 L/m<sup>2</sup> may be applied in a single coat; greater amounts will require two or more coats. Use a roller after each application to remove entrained air. Use a Graco King 60:1 or equivalent with a tip size of 0.28mm to 0.43mm. The wet coating will not be clear. When not in immediate use, seal off to avoid curing at air exposed points.

## **CLEANING OF TOOLS**

Clean all tools and application equipment with proprietary cleaning solvent immediately after use. Hardened and/or cured material can only be removed mechanically.



## LIMITATIONS

Do not apply Decothane Clearglaze on substrates with rising moisture.

On substrates likely to exhibit outgassing, apply during falling ambient and substrate temperature. If applied during rising temperatures "pin holing" may occur. Substrate preparation is crucial to ensure durability. Please follow the instructions in the technical datasheet of the corresponding Primer and pretreatment. Applications of Decothane Clearglaze in confined spaces must be undertaken in accordance with material safety datasheet recommendations.

Do not use Decothane Clearglaze for indoor applications.

Do not apply close to the air intake vents of running air conditioning units until either switched off or isolated as vapour may be drawn into the building.

Do not apply cementitious products (e.g. tile mortar) directly onto Decothane Clearglaze.

## VALUE BASE

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

## ECOLOGY, HEALTH AND SAFETY

### LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. 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. The user of the product must test the product's suitability for the intended application and purpose. Sika 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.

#### TECHNICAL ENQUIRIES

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#### Product Data Sheet

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