
Product Description

IPS FLOORCOAT 2K is a two component, ambient curing, epoxy polysiloxane hybrid highly durable floor coating available in RAL, BS and custom colours. Epoxy Polysiloxane chemistry provides outstanding resistance to aggressive weathering, chemical, mechanical & tough environmental conditions. Curing from ambient conditions to a hard & durable finish floor coating which is resistant to foot and automotive traffic. High chemical resistance, low VOC (high solids), non-isocyanate fully tintable polysiloxane for interior and exterior flooring substrates

Intended Applications

For use in high performance industrial & commercial flooring applications. Application over suitability prepared inorganic zinc (IOZ) and epoxy-polyamide primers, hot dip galvanised or DTM. Contact the Performance Polymers technical department for system recommendations as per ISO 12944.

Technical Information

Product chemistry

A two component, ambient curing, Epoxy Polysiloxane Hybrid

Colour

RAL, BS and Custom Colours

Gloss

Gloss / Semi-Gloss

Theoretical spreading rate

10.67 m²/l at 75µm DFT

Typical film thickness

75 – 150µm DFT per coat

Mixing Ratio (5L)

4L (PART A) : 1L (PART B)

Application methods

Airless, airspray and brush & roller

Volume solids

80% + / - 2%

VOC

<150 g/L

Specific gravity

Approx. 1.31 g/ml (colour dependant)

Flashpoint (ISO 1523)

Base 30°C

Hardener 30°C

Temperature resistance

120°C

Surface Preparation

Substrates must be clean, dry and free from any contamination. All oil, dirt, grease, dust, foreign material and loose rust must be removed prior to coating.

Cementitious substrates

Free of dust, loose and friable particles, oil, efflorescence, and existing paint coatings. Cracks in concrete must be repaired prior to application of IPS FLOORCOAT 2K. Cleaning is best achieved by steam cleaning or sweep blasting. Best results are obtained on dry, clean, and crack free cementitious surfaces. The substrate must look dry with no damp patches. New concrete must be at least 28 days old.

Substrate Temperature

Substrate temperature should remain between 10 to 50°C and remain 3°C above the dew point during application. Product application conditions range from 10 to 50°C & 30 - 85% relative humidity. Higher or lower temperatures & humidity's will result in faster or slower curing respectively.

System Specifications

Typical 1 or 2 coat system for high performance industrial or commercial application:

- IPS FLOORCOAT 2K : 75 - 150µm DFT

Application of IPS FLOORCOAT 2K by airless or airspray are the preferred application methods when applied over suitably primed substrates. Applications of 2 or 3 coat systems will depend on requirements needed from the protective coating system. Please consult Performance Polymers for further information on coating specifications.

Application

Airless

Pump: 30:1 or larger

Tip size: 0.015 - 0.017 inch

Pressure: 2000 psi / 135 bar (minimum)

Thinning:

Not Required

Airspray (conventional)

Pressure: 30 - 40 psi / 2.1 - 2.8 bar

Nozzle orifice: 1.8 - 2.2mm

Thinning:

5-10% Thinner X21

Brush/roller

Thinning:

0-5% Thinner X21

Multiple application coats maybe necessary to ensure required DFT is reached.

Mixing

IPS FLOORCOAT 2K is a two-component product, settling can occur during transport & storage. The material should always be mixed using a mechanical agitation ensuring all settled-out pigments are dispersed until a uniform consistency is reached.

Reactivity

IPS FLOORCOAT 2K is curing via chemical crosslinking reaction of A and B components.

Pot life

7 hours at 10°C

4 hours at 4°C

2 hours at 40°C

Reducer

Thinner X21

Clean up

Use Thinner X21 for cleaning after product use. Ensuring all material is flushed from application equipment.

Packaging

5L litre:

4L - Part A 5.48kg per can

1L - Part B 0.96kg per can

Coating & Curing Schedule

Spreading rate information

DFT	Theoretical spreading rate
75	10.67 m ² /l
150	5.33 m ² /l

Film thickness information

DFT/WFT	Minimum (µm)	Maximum (µm)
Dry film thickness	75	150
Wet film thickness	94	188

Drying & recoating information

Temperature (°C)	Touch dry	Overcoating time	Dry to handle
5	10 - 16 hours	16 - 24 hours	16 - 24 hours
10	6 - 10 hours	16 - 24 hours	16 - 24 hours
23	2 - 3 hours	6 - 8 hours	8 - 16 hours
38	1 - 2 hours	2 - 4 hours	6 - 10 hours

Notes: drying times can vary upon different environmental conditions. Coating should be applied within the information supplied to ensure drying & overcoating times are not affected. Product is fully cured from ambient conditions & does **not** require heating to obtain mechanical & corrosion protection.

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Additional Information

Safety precautions

This product is for use only by professional applicators in accordance with information in this Technical Data Sheet (TDS) and the applicable Material Safety Data Sheet (MSDS). Refer to the product MSDS before using this material. All usage of this product must be kept in compliance with local, health, safety & environmental conditions & regulations.

Storage & shelf life

Material should be stored in a dry, shaded environment away from heat & ignition sources. Shelf life is minimum 24 months at 23°C.

Important

The information of the product displayed herein is to the best knowledge of Performance Polymers. All testing has been under strict laboratory conditions which Performance Polymers believes to be reliable; therefore, onsite performance can vary with application in different conditions. Additionally, Performance Polymers has no control of external factors e.g. substrate quality of preparation or any other factors which can hinder affect the performance of this product. The information in this TDS is not to be extensive; any use without confirmation from Performance Polymers is doing so at their own risk. Any deviation of performance on site isn't liable to Performance Polymers. The performance of this product carries no warranty. The documentation of this product should be thoroughly read before use.