

TECHNICAL DATA SHEET

ISONEM FLOOR 2K

(Solvent Free Epoxy Coating)

Product Description

SOLVENT-FREE EPOXY BASED COATING, the interior surface coating system which is solvent-free epoxy resin-based, very high chemical, and physical resistance coatings creating and can be applied in the form of thick coats, developed for protection to concrete and metal surfaces against chemical and physical external effects.

Usage Areas

- In industrial facilities, factories, refineries, pharmaceutical, and food production areas, hospitals, schools, stores, warehouses,
- It is used as a durable long-life coating in acid production plants, chemical factories, laboratories, automotive industry areas, treatment plants, water tanks, metal, and concrete floors and walls.

Technical Specifications

Density A comp. (25°C, g/mL)	: 1,55 ± 0,10
pH (25°C)	: Not applicable (N/A)
Viscosity A comp. (25°C, mPa.s)	: 3000 - 5000
Solid content B comp. (% Weight)	: Not applicable (N/A)
Water transmission rate (kg/ m ² . h ^{0,5})	: < 0,1 CLASS W ₃
Adhesion strength by pull-off test (N/mm ²)	: Rigid system without trafficking ≥ 1.0 N/mm ² , with trafficking ≥ 2,0 N/mm ²
Permeability to water vapour (m)	: 5 ≤ S _D ≤ 50 CLASS II
Touch-free Drying	: 6 hours
Through-dry time	: 7 days
Pot life (23°C)	: 30 - 40 minutes
Solvent	: Organic solvent
Class of fire reaction	: C fl S1
Color	: Produced in RAL colors

Application Procedure

Surface preparation

For the concrete surface: Concrete surfaces must be free of all oil, dirt, dust and loose material, contamination and must be completely dry and clean. For new poured concrete surfaces, the drying time 21 days should be waited, after of concrete set, the application should be started. Before the application of ISONEM FLOOR 2K, the surface should be primed with ISONEM EP Primer (epoxy-based primer) with a consumption of 0,250 - 0,400 kg/m².

For the steel and metal surface: If there is old epoxy paint on the surface and cannot be removed, the surface of the old paint should be roughened with sandpaper and cleaned with solvent. Before ISONEM FLOOR 2K application, the surface should be primed with ISONEM Anti Rust Primer (Anticorrosive Primer) with a consumption of 0,250 - 0,400 kg/m².

Mixture preparation: First, open the box of the solvent-free paint (component A) and stir for a few minutes. Then, by adding the hardener (B-Component), the mixture is mixed for a further two minutes until the mixture is homogeneous. It is very important to mix the material in the specified mixing ratio.

Application method: The mixture is applied to the prepared surface with a brush, roller or a suitable sprayer. The second layer application should be made as soon as the first layer dry, before exceed 24 hours. The application must always be in the same direction.

Application Conditions / Limitations

Application	: In the same direction as the first
Surface humidity	: Dry surface For concrete, marble, granite, raw wood, tile, ceramic etc.
Primer usage	: surfaces: ISONEM EP PRIMER. For metal/steel surface; ISONEM ANTI RUST PRIMER (Consumption: 250 - 350 g/m ²)
Primer consumption	: 0,250 - 0,400 kg/m ²
Product usage	: 2 layers
Product consumption	: 1 kg/m ²
Paintable (Coverage) Area	: min. 5 m ² /1 set
Between two coats	: 6 - 24 hours
Recommended application tools	: Roller (synthetic epoxy), brush, suitable spray
Application temperature (°C)	: 5 - 35 °C
Things to consider during and after the application:	The application surface must be clean and free from all impurities like dirt, oil, and mud. FLOOR 2K should be applied within 6-24 hours before the primer is completely dry.
Other ISONEM products recommended:	In primer application, ISONEM EP PRIMER or ISONEM ANTI RUST PRIMER should be used depending on the application surface.

IMPORTANT

The surface should be protected from rain, water, mechanical loads and impacts for 24 hours during and after the application. It is suitable for interior using only. After mixing A and B components, it should be consumed within 30-40 minutes (23 ° C). Pot life extends at lower temperatures and shortens at higher temperatures. It is suitable for interior using only.

Packaging & Storage

Packaging	: 5 kg set (Solvent-free epoxy paint 4 kg, hardener 1 kg canister)
Storage temperature (°C)	: 5 - 35 °C
Shelf life	: 24 months from date of production if stored in original, unopened, undamaged packages.
Storage condition	: Store tightly closed in a dry and cool place away from heat and fire.

Cleaning of Tools

Clean all tools and application equipment with cellulosic thinner immediately after use.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

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Isonem Paint and Insulation Technologies Construction Industry Trade Inc. - 35470/İZMİR ITOB OSB 10001 Sok. No:20 Tekeli Menderes / İzmir - TURKEY 19		
2765-CPR-0136 TS EN 1504-2: Surface protection systems for concrete - Coating (FLOOR 2K) DoP No: 14		
	STANDARD VALUE	CONTROL VALUE
Permeability to water vapour	Class I $S_D < 5$ m (permeable to water vapour) Class II $5 \text{ m} \leq S_D \leq 50$ m Class III $S_D > 50$ m (not permeable to water)	Class II - 50 m
Capillary absorption and permeability to water	$w < 0,1 \text{ kg/m}^2 \cdot \text{h}^{0,5}$	$0,05 \text{ kg/m}^2 \cdot \text{h}^{0,5}$
Adhesion strength by pull-off test	Without trafficking $\geq 1,0 \text{ N/mm}^2$ With trafficking $\geq 2,0 \text{ N/mm}^2$	Rigid system without trafficking $1,0 \text{ N/mm}^2$ with trafficking $2,0 \text{ N/mm}^2$
Dangerous substances comply with 5.4		
Class of fire reaction: C fl S1		

Statement of Responsibility

The technical information and application advice given in this ISONEM Paint & Insulation Technologies publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

