

POLISH PRODUCER OF NANOISOLATIONS

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THERMIX
RENOVATIONS



APM FOIL® - a temporary, easy peel-off coating used to protect non-porous surfaces. Protects against damage caused by scratches, abrasion, stains, water stains and corrosion. Coating applied in a liquid form which when dry creates a strong, flexible and transparent layer that will protect surfaces.

SFEROLIT[®]
LIQUID THERMAL INSULATION



SFEROLIT® - is a liquid ceramic coating with special properties of thermal insulation and waterproofing. It is used as heat-insulating, anti-fungal, anti-corrosion coating for internal and external walls, window jambs, roofs, floors, technical infrastructure of the building, pipelines, machinery and means of transport.

CE

NANOISOLATIONS | THERMAL INSULATION IN LIQUID | ECOLOGICAL SOLUTIONS





Protective foil for painting

MAIN ADVANTAGES OF APM FOIL®:

- water based,
- 100% biodegradable,
- easy to apply and transparent,
- easy cleaning of tools after application (water),
- chemical resistant - resistance to solvents and petroleum products,
- leaning properties (the protected surface does not require washing after removing the foil, APMFOIL® absorbs dust from underneath),
- reduction of construction costs (no need for surface cleaning),
- permanent protection against scratches and UV radiation,
- speed of application (no tedious wrapping with tapes and foils).

- **BIODEGRADABLE • FAST SETTING**
- **EASY TO PEEL OFF • WATER-BASED**

- **SURFACE PROTECTION UP TO 24 MONTHS**

PRODUCT DESCRIPTION:

Liquid protective film THERMIX APM FOIL® is a gel liquid which, when dry, forms a dense polymer film. Easily removable / peelable coating, used to temporarily protect surfaces from minor damage, scratches and dirt. With its help, it is possible to protect almost any surface during construction or renovation. It protects from dust, paint, cement and mechanical damage caused by welding spatter of metal filings and scratches. It is a liquid foil, which allows you to simplify and speed up any construction work, and most importantly, reduce the cost of the preparatory process of construction and finishing works.

APM FOIL® is a liquid foil, which can be applied to surfaces by a roller, a brush or a spray gun. It is water-based, non-toxic and primarily biodegradable. It protects the surface up to 12 months, and even up to 24 (depending on the place of application and conditions). It adheres well to the substrate in the form of a strong transparent foil. It is easily removable without leaving any traces on the surface. It leaves a perfectly clean surface, does not require washing (saving on cleaning after renovation and construction works). APMFOIL® is a water-based emulsion coating that can be applied to coloured or unstained vertical or horizontal surfaces for temporary protection.

APPLICATION:

APPLICATION: Glass facades, facade panels, windows, shop windows, doors, elevators, walls, handrails, furniture, bathroom and kitchen fittings, machine elements, polished concrete, tiles and terracotta, new cars, buses, protection of machine parts during storage or transport, protection of coated metals during production or maintenance, protection of spray booths.

Refurbishment of apartments: painting and plastering works, finishing works, tiling. Temporary protection of ceramic and marble surfaces. Protection of the surface from damage, during construction and repair of yachts, protection of decorations, advert banners and boards during fairs, can be used as transportation packaging and protection of advertising products in transit. Protection against dirt, dust, oil, grease, rust and corrosion.



THERMAL INSULATION FOR PAINTING

Thermal conductivity λ_c 0,0025 W/mK



WHAT IS SFEROLIT®

SFEROLIT® - is a ceramic coating built of millions of vacuum hollow particles, which, after application and drying, form a tight sealing membrane. Particle diameter from 20 to 120 microns. The insulating properties of this material are based on the vacuum capacity to maintain the set temperature, limiting the passage of chilled or heated air particles from outside.

SFEROLIT® liquid thermal insulation is used in the broadly understood construction industry (historic, residential, commercial, industrial, military), as well as in the energy sector (pipelines, tanks, cisterns, machines and devices), as well as in various types of transport (railway, sea, road, air and military).

MAIN ADVANTAGES OF SFEROLIT®:

- flexible
- flammability class B1
- absorbs vibrations
- protects against corrosion
- high adhesion
- lowers the cost of energy consumption
- minimises the effects of condensation
- vapor permeable (breathes)
- durable during operation
- eliminates 100% of thermal bridges
- protects against moisture, mould and fungi
- protects against weather conditions
- improves energy efficiency up to 50%
- increases sound insulation - min. 10%
- thermal conductivity λ_c 0.0025 W / mK
- ecological (harmless to health and the environment)
- operation temperatures of -50°C to + 150°C



PROPERTIES AND SPECIFICATION OF APM FOIL®

| | |
|--|--|
| The physical state | Liquid |
| Colour | Clear, colourless |
| Smell | Characteristic |
| Boiling point, initial boiling point and boiling range | approx. 100°C |
| Flash point | Not applicable |
| Decomposition temperature | Not applicable |
| pH | 5-7 |
| Kinetic viscosity | 20000-30000 mPa*s (dynamic, Brookfield RVF 6/20 23°C) |
| Density or relative density | 1.09 g/cm ³ |



PROPERTIES AND SPECIFICATION OF SFEROLIT®

| COATING ADHESION | UNIT | VALUE |
|-----------------------|------|-----------|
| for concrete surfaces | MPa | 1.24 |
| for concrete surfaces | MPa | 1.98 |
| for metal surfaces | MPa | above 1.0 |

| FEATURE | UNIT | VALUE |
|--|------|----------|
| Peel-off extensibility | % | min. 8.0 |
| Elongation | % | 65 |
| Extensibility resistance after application | MPa | 2.0 |



TYPES OF MATERIALS TO BE APPLIED:

Marble, granite, glazed ceramic, glass, PVC, lacquered, oiled, laminated, vinyl and epoxy surfaces, aluminium, polished concrete, stainless steel, polycarbonate and most non-porous surfaces.

DRYING TIME:

With an application of approx. 150 microns the coating will be fully dry after about 60 minutes at room temperature. Forced drying and increased drying temperature up to a maximum of 40 °C can be applied. Full hardening depends on the ambient temperature, humidity, ventilation and the thickness of the applied layer and takes from 0.5 to 24 hours.

ACTION ON SFEROLIT®

REVOLUTIONARY NANOTECHNOLOGY IN ENERGY SAVING SYSTEMS HEAT AND SAFETY

Liquid thermal insulation as a result of polymerisation becomes a permanent covering, reducing heat loss up to 40%, it is impervious to water, and at the same time allows the surface to breathe freely. Vapor permeability, thanks to which there is an intensive air exchange, additionally saves 7-9% of heat and protects against the development of fungi, mould, corrosion and other negative effects of the environment.

The material can expand by a quarter without interfering with the adhesion to the surface. 1m² of the coating can withstand up to 380 ml of water / hour and dry quite quickly after rain. That is why SFEROLIT® is used as a finishing agent for insulating floors, ceilings, roofs, walls and insulation of technical infrastructure inside and outside the building.

CERTIFIED PRODUCTS BY ACCREDITED LABORATORIES IN THE EU:



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