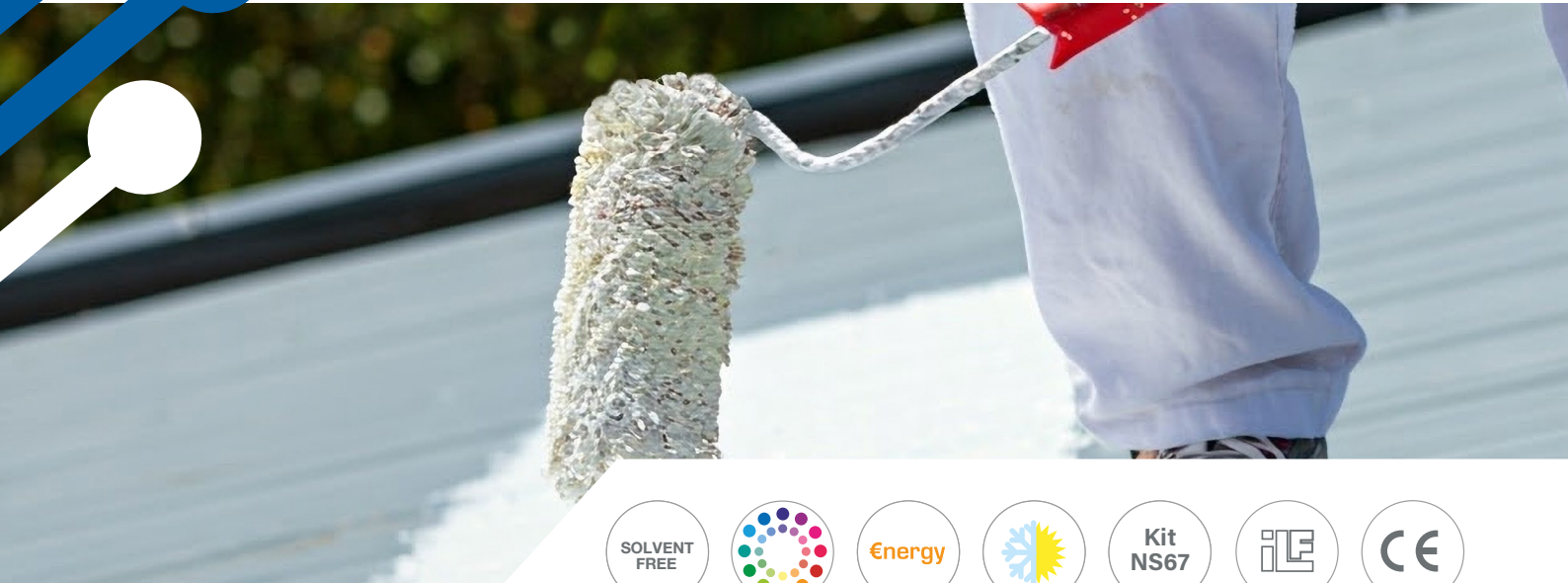


# IR METALLI

HEAT-REFLECTIVE FINISH PAINT  
FOR METAL SURFACES



**Thermal-elastomeric coating, for metal and alloys surfaces**



12,5 L

## COMPOSITION

*Phosphates-acrylates, reflective micro-components, water-based fillers*

## MAIN CHARACTERISTICS

*Waterproof, high elasticity, excellent thermal regulator, ultra-reflective*



Heat reflective

## HIGH QUALITY PAINTING

Its particular basic formulation offers all the advantages of a high-quality elastomeric paint, also improving its technical aspects: waterproof, easy clean up, excellent coverage, antifungal function and it offers an excellent combination of elasticity and surface adhesion. Not walkable.

## ENERGY SAVING EFFECT

Heat insulating particles reduce heat transfer by reflecting thermal radiation and, at the same time, creating a barrier against humidity. This translates into significant energy saving.

## PROPERTIES AND BENEFIT

It is a thermal-elastomeric micro-coating. It is made with acrylate phosphates and reflective micro-components, hollow ceramic micro-spheres, fillers and highly reflective TiO<sub>2</sub>.

**It is a high quality elastomeric micro-coating, with insulating, heat-reflective and waterproofing properties, specially designed for metal and alloys surfaces.**

Based on special thermal reflective components, on a micro and nano-scale, it creates a high-performance product for energy saving. Thanks to its high elasticity (+ 130%) and its ability to reflect the Sun's rays (over 96%), it mitigates Urban Heat Island Effect, offering optimal heat and sun protection, reducing heat transfer (infrared rays).

The material guarantees perfect adhesion to the surface and, thanks to its elasticity, it inhibits thermal shocks due to sudden climate changes.

**The material is resistant to UV rays and to many adverse effects of environmental pollution or unfavourable climatic conditions.** It is very resistant to aggressive environmental conditions such as acid rain, air containing sulfur pollutants or marine environments, that normally damage the surfaces. IR METALLI can be coloured with soft hues.

## APPLICATION

IR METALLI, being water-based, can be applied directly on clean and oxide-free surfaces.

**APPLICATION NOTE** Mix well before use.

The product is ready for use and does not need any kind of dilution. Application temperature must be between 5-35 °C. Final performance of the material can be adversely affected by unfavourable climatic conditions occurring within 24 hours of application.

Two coats are required, with a good quality brush or roller. On discontinuous surfaces, apply by spraying. Do not apply excess paint. Make sure to provide adequate covering to all edges and corners. Wait min. 4-6 hours before proceeding with the subsequent layers.

## APPLICATION UTENSILS AND STORAGE

After use, all tools and equipment must be cleaned immediately with water.

Store in a cool, dry and well-ventilated place away from heat and direct sunlight.

Containers which have been partially used should be kept carefully closed. Protect from frost. Always transport in closed containers that are up-right and secure. Stored in its original airtight containers, the product has 18 months' shelf life, undiluted.

Before use, read and understand the Safety Data Sheet.

## SURFACE PREPARATION

Before applying, the application surface should be dry and clean. Carefully clean the surfaces and remove any residues. Very dirty surfaces (oxidation, smog) must be pre-treated with special detergents and high-pressure water washing. In case of oxidation (rust) the surfaces must be treated with a passivating primer.

## CONSUMPTION

5-6 m<sup>2</sup>/L per coat, (30-35 m<sup>2</sup> / pack), surface-to-surface variable.

## DRYING TIME

Usually 4/6 hours, depending on the coating thickness. Low temperatures and high humidity can affect drying times.

## TEST AND PERFORMANCE

☑ Test	📄 Reference Standard	📍 IR METALLI
Freeze-thaw cycle test	DIN 52104, Part 1/A	>200
Frost Resistance	DIN EN ISO 10545 Parte 12	>200
Chemical Resistance	DIN EN ISO 10545 Parte 13-14	<1,5% Weight loss
Cross-cut Test	DIN EN ISO 2409	ISO: 0-1
Water permeability	DIN EN 1062-1	W3 LOW
Water vapour permeability	DIN EN ISO 7783-2	V3
Adhesion	DIN EN ISO 4624	4,2 MPa
Testing of rubber	DIN 53504	138
Gloss	DIN 1062-1	G3mat
Thermal resistance	UNI EN ISO 1934:2000	R= 0,38 m <sup>2</sup> K/W
Measurements of drying times	DIN 53150	Touch-dry <0,5h / Dry Film: <8 h
Thickness	DIN EN ISO 2178	Wet: 400 µm / Dry: 300 µm
Washability	DIN EN ISO 11998	Class 1
Packaging: 12,5 L	Consumption : 5-6 m <sup>2</sup> /L	Tintometric system: soft colours

The correct application of the product is the sole responsibility of the user. Any visits or site inspections by Nanosilv staff are intended to provide technical application recommendations, but in no case to inspect the construction site or perform quality checks on behalf of Nanosilv srl.

### PRECAUTIONARY STATEMENTS

Keep out of reach of children. Do not reuse container. Avoid contact with skin and eyes. In case of skin contact, wash off with soap and plenty of water. Never use solvents or thinners. In case of eye contact, rinse thoroughly with plenty of water, seek medical assistance. If swallowed, seek immediate medical assistance and show container or label to the doctor in attendance. Do not let product enter drains. Dispose of containers contaminated by the product in accordance with local or national legal provisions. Before use, read and understand the Safety Data Sheet.

### LIMITED WARRANTY INFORMATION - Please read carefully.

The information contained herein is true and correct to the best of Nanosilv's knowledge. Final determination of the suitability of the material, in relation to the specific use of the product, is the sole responsibility of the user. Nothing herein should be interpreted as a warranty. Since conditions and methods of use of our products are beyond our control, observing applicable law or regulation is the sole responsibility of the user. Nanosilv disclaims liability for any incidental or consequential damages. This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

## ITEM SPECIFICATIONS

Elastomeric paint for roofs, heat-reflecting, waterproof and UV-resistant, with phosphatiacrylates, micro reflectors and nano-structured TiO<sub>2</sub> (titanium dioxide), which reflect thermal radiation.

Characteristics:

Finish paint with thermal resistance  $R = 0.38 \text{ m}^2\text{K/W}$ , freeze/thaw cycle  $>200$ , chemical resistance  $<1.5\%$  weight loss, water permeability  $W < 0.1$ , water vapour diffusion V3, adhesion 4.2MPa, elasticity 138, washability Class I.

The product must protect:

- from heat dispersion through opaque surfaces and thermal bridges;
- from overheating due to thermal radiation;
- from atmospheric agents. Material certified according to UNI EN 1934:2000.

To be applied directly on horizontal and inclined external surfaces, on bituminous membranes and walkable roofs.

For metal surfaces, mechanical removal of any oxidation and preventive treatment with anti-rust or passivating corrector is necessary.

The application temperature must be between 8-35 °C. Apply 2 coats with a good quality brush or roller without dilution, with a time interval of 6 hours after the previous application.