

Article code	TMX040, TMX120, TMX600
Article name	Titanceramix ceramic microspheres
Weight	
Volume	
Packaging	
Package weight	

Field of application

Mixture of hollow ceramic nanospheres, enriched with mould-reducing, sanitising, anti-odour, photocatalytic agents with UV protection, heat-insulating and heat-reflecting.

Titanceramix is a unique and futuristic product, launched in 2017 and improved in 2023.

It is derived from NanoceramiX. Indeed, it contains the same ceramic nanospheres as the latter, mixed with additional components of the highest quality and purity, with a unique formulation that also makes it heat-insulating.

The nanospheres offer anti-condensation and heat-reflecting properties, while the aerogel gives the additive (and thus the paint into which it is added) heat-insulating properties.

The agents in Titanceramix are the same as in the best anti-mould paints on the market, while the photocatalytic titanium dioxide used in the formulation is the latest generation used in many architectural works around the world.

Photocatalytic titanium dioxide disinfects air and surfaces, eliminates pollutants such as VOCs (Volatile Organic Compounds) and many organic microorganisms in the environment. Thanks to light, it restores its sanitising action, ensuring longer-lasting hygiene and greater safety.

We recommend the application of Titanceramix indoors and outdoors on rough substrates such as standard plaster, fine mortar or similar.

Titanceramix makes any paint heat-reflecting and heat-insulating, but does not alter its other physical and chemical properties; on the contrary, it improves them.

Professional uses

Industrial uses

Methods of use

Watch the video for the correct mixing of the product.



www.nanoceramix.com

Recommended dosage: 80 grams of product per 1 litre of undiluted paint

Precautions for use

The product is inert, inorganic. Handle with care. Avoid inhaling dust. Avoid direct contact with eyes, skin and clothing.

Use recommended Personal Protective Equipment: EN 374 gloves, FFP S3 masks (EN 149), safety glasses (EN 166)

Wash thoroughly after handling. During work, do not eat, drink or smoke. No hazardous decomposition products.

Classification and labelling

Product definition: Mixture

Classification according to Regulation (EC) No 1272/2008 (CLP):

The mixture is not classified.

Labelling according to Regulation (EC) No. 1272/2008 (CLP):

This product is labelled as non-hazardous.

Hazard pictogram:	None
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Hazard indications:	None
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Precautionary statements:	None
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Chemical-physical properties

Physical and chemical properties	Value
Physical state	Powder solid
Average particle size	100 µm
Thickness of insulation coating	250 µm (no. 2 coats of product)
Colour	White
Odour	None
pH	Not determined
Melting point	1600 °C
Flammability (solids, gases)	Non-flammable
Vapour density	Not determined
Relative density	0,49 ± 0,05 g/cm ³ 20 °C
Humidity	1,3 ± 0,3 %
Solubility	Insoluble in water
Oxidising properties	Non-oxidising
Thermal conductivity	0,101 W/mK
Emissivity	0,62 W/m ²
Surface (or liminal) resistance of the inner wall treated with two coats of product	0.1655 m ² K/W (Certimac certification)
Surface (or liminal) resistance of the external wall treated with two coats of product	0.0425 m ² K/W (Certimac certification)
Evaluation of anti-mould activity (UNI EN 15457:2008)	Growth after 21 days = 0 CFU

Physical and chemical properties	Value
Evaluation of photocatalytic activity (UV-Vis analysis)	Absorbance after 1 h A.U. = - 0,031096
Artificial ageing activity assessment (ASTM G154/12)	A 0.2 to 0.5 difference $\Delta E = 0.28$

Technical Datasheet

Paint for [interior/exterior] ... [paint characteristics] ... containing inert, hollow ceramic microspheres with nanotechnology heat-reflective coating and characterised by mould-reducing, absorbent, photocatalytic and UV-protective agents, such as TitanceramiX or similar.

It will be necessary to apply at least two coats of paint, after preparing the substrate consisting of checking the plaster's sealing, cleaning and remediation with antibacterial solutions, sanding when the surface is dry after cleaning, and application of primer if necessary.

This paint will have a thermal conductivity value calculated according to the UNI EN 1745 standard of no more than 0.11 W/mK, performance against mould formation evaluated according to the UNI EN 15457:2008 standard with a result of 0 (zero) mould growth after 21 days, slow ageing over time as evaluated by the ASTM G154/12 standard, with a result of less than 0.5 or very small or no difference.

This paint will have VOC, PM_x, NO_x, SO_x absorption characteristics and photocatalytic performance verifiable by UV-Vis analysis.

Storage, Disposal and Transport

Do not reuse empty containers. Dispose of them in accordance with current regulations. Any product residues must be disposed of according to good working practice, avoiding dispersal in the environment.

Do not discharge into sewers, drains or watercourses.

Comply with current legislation on the protection of water and soil from pollution (Legislative Decree No. 152 of 3/4/2006).

Dispose of used product and containers using authorised companies, in accordance with the provisions of Legislative Decree No. 152/2006 as amended.

Depending on the specific use and disposal characteristics of the user, different EWC codes may be assigned (2008/98/EC).

Recover if possible. Send to authorised disposal plants or for incineration under controlled conditions. Operate in accordance with current local and national regulations.

The product does not fall within the scope of EU directives and Italian legislation concerning inland transport of dangerous substances, by road (A.D.R.) by rail (R.I.D.), by sea (I.M.D.G.).