

NanoMatrix®

Mineral Oil Based Mould Release Agent

Product Definition

NanoMatrix is a mineral oil-based mould release agent preventing the adhesion of hardened concrete on the mould surface.

Use

NanoMatrix is recommended for use in the applications and purposes below.

- Concreting applications requiring smooth concrete surface.
- To speed-up the demoulding workmanship.
- In non-absorbent or very low absorbent moulds.

Advantages and Properties

- NanoMatrix ensures easy removing of moulds without damaging the hardened concrete surface.
- Helps to obtain smooth surface.
- Easy to apply, low consumption rate.
- Does not contain any substance that may be detrimental on the appearance and colour of the surface.
- Makes easier the demoulding operations and reduces the cost.
- Excellent adhesion to the surface of the vertical moulds.
- Prevents the entrapping of air bubbles between the fresh concrete and the mould surface during vibration.
- Can be used not extreme cold or hot weather conditions.
- Does not contain flammable vapor.
- Does not contain any compounds that may cause corrosion of reinforcing steel.

Application Details, Suggestions and Warnings

- NanoMatrix is a ready to use product. It should not be diluted.
- It can be used by roller, brush or spraying. The application should be homogeneous. Several layers can be applied in low-absorbent moulds.
- NanoMatrix should be gently mixed before use. No need to keep mixing during application.
- NanoMatrix, and similar mould release agents, should be avoided to contact with steel reinforcement. Concrete – steel bonding will not be ensured in contacted regions.
- Excessive usage should be avoided. Excessive usage may cause spotting or oil traces on the surface of the hardened concrete.
- The mould surfaces should be dry and free from dust and dirt before NanoMatrix application.

Recommended Dosage

The typical consumption rate of NanoMatrix depends on the absorbency level of the mould. Generally, a surface of 40 m² can be oiled by 1 litre NanoMatrix in case of non-absorbent moulds (steel or plastic moulds). In absorbent moulds, a surface of 20 m² can be oiled by 1 litre NanoMatrix.

Technical Properties

Colour and form	Transparent yellow - liquid
Chemical base	Mineral oil and performance enhancing additives
Density (kg/lt)	0.85 – 0.89 (at +20 °C)
Viscosity (cP)	30 – 35 (at +20 °C)
Freezing point	< -10 °C

Cleaning of Tools

Concreting tools contact with NanoMatrix can be easily cleaned with water.

Packaging

20 kg drum

180 kg tote

850 kg IBC

Storage and Shelf Life

Shelf life of NanoMatrix AQ is 24 months when stored in its original package and recommended storage conditions. NanoMatrix AQ should be stored in dry conditions between +5 °C and +35 °C. It should be protected from direct sunlight.

Security and Health

In case of contact with skin, wash with clean water. In case of contact with eye, wash with clean water. Eye contact should be medically consulted immediately. For further information please refer to Material Safety Data Sheet (MSDS) of the product.

Legal Liability

The technical recommendations in this product data sheet are based on the experimental studies performed on reference concrete mixtures designed in the R&D laboratories of LYKSOR. The results may not be applicable to different concrete mixtures produced with different materials than the ones used in the experiments in Lyksor. All customers and users are required to determine the appropriate LYKSOR products for their intended use and to test the suitability of LYKSOR product for their application. Please contact LYKSOR for the appropriate product selection and usage details. LYKSOR is not responsible for the improper usage of the products.