

DATA SHEET



NANOTECHNOLOGICAL ADDITIVE FOR CONCRETE WITH GRAPHENE OXIDE

- ✓ Increased impermeability
- ✓ Increase in mechanical resistance
 - ✓ High fire resistance
 - ✓ Anticorrosive protection
 - ✓ Provides better flexibility
 - ✓ Antimicrobial protection





Description

State-of-the-art nanotechnological additive for concrete reinforced with graphene oxide, with a specialized formulation to improve multiple properties of concrete and mortar.

Applications

All types of concrete:
Conventional concrete, reinforced concrete, structural, mortar, block and concrete tubes.

Technical data

Type	Water-based additive
Appearance	Fluid liquid dark gray color
Freezing point	0 °C (32 °F)
Relative density	1.16

Compatibility with other additives:
It is compatible with other conventional additives.

How to use

Shake well before use, calculate the amount of additive according to the dosage calculation section, then add the additive into the concrete already mixed with the line additives and mix perfectly for a minimum of 10 minutes.

Dosage Calculation

Quantity per kg of cement	0.25 ml
Quantity per bag of cement 50kg	12.5 ml
Quantity per ton of cemen	250 ml

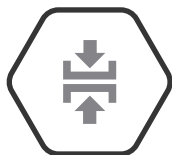


**ATTENTION HARMFUL IN
CASE OF INGESTION**



Certified Laboratory Results

Test results support an increase in multiple concrete properties.



7-18 % higher compressive strength
(up to 20% in cement mortars).



3.5 times more waterproof.



12-17 % higher tensile strength by diametric compression.
Elastic modulus increase 4-12%.



In fire resistance tests, a thermal
gradient is obtained 70% higher
than the minimum required.

These results may vary depending on the quality of the aggregates, the type of cement, the design of the concrete and the homogenization of the mixture. The comparison was made with experimental and on-site results obtained from hydraulic concrete without graphene additive.

It is advisable to carry out the pertinent tests with the product and determine its suitability before its final application.

Storage

Up to 12 months in its original sealed container, keep indoors in a warm and dry place.

Risk identification

It is classified as a non-hazardous substance.

Other risks:

Non-explosive, non-toxic, non-flammable.

Material handling

The use of appropriate gloves (neoprene or latex) is recommended. dust mask and goggles.

Risks in material handling

Description of first aid:



Inhalation:
Rinse nose and mouth
with water.



Eye contact:
Do not rub eyes.
Immediately flush with plenty
of water for up to 15-20 minutes.
Get medical attention if symptoms
appear after flushing.



Ingestion:
Rinse nose, mouth, and throat
with water, then drink plenty of water.
Never make an unconscious
person vomit.
Get medical attention.



Symptoms and effects:
May cause respiratory irritation,
contact with skin and eyes.
No long-term effects have
been found.



Skin contact:
Wash with plenty of soap and water.
Continue rinsing for at least 15 minutes.
Get medical attention if
irritation develops after washing.



Waste management

Spills

In case of spillage, there is no danger, use safety material for collection. It should be mechanically collected and placed in a suitable container for further treatment.

Material waste

Because it is an inert material, it could be disposed of as special waste that can be sent to a containment area for later handling by a specialized waste management company.

Legal note

All the information contained in this document and advice provided was based on the current knowledge and experience of Energeia Fusion, S.A. de C.V. as long as the additive has been properly stored, handled and applied according to the recommendations.

In case of changes in parameters of application or if it is planned to use for a different application, consult first with Energeia Fusion Technical Service.

For more information contact contact@graphenemex.com

Code	I-ENER-8.3
Version	0
Revision	03-01-22

