

Nanomol-C is an adsorbent for Insulating Glass Units with specifications according to EN 1279:2018
PRODUCT DESCRIPTION

Nanomol-C is a mixture of calcium oxide containing natural desiccants and natural binders. It is designed for a static water adsorption process with very low adsorption speed. With an optimized density it can reach a very good water adsorption capacity in a specific volume. It has no chemical reaction to aluminium, steel, galvanized steel and plastics. If it is used in treated spacer profiles or profiles made of other materials; relevant trials must be carried out to ensure the product's suitability. It is produced only for insulated glass manufacturing. For different applications please contact NEDEX Technical Department.

TECHNICAL SPECIFICATION

Nanomol-C meets the regulation requirements of EN 1279:2018. The following parameters are measured and registered for each batch of the product and real figures are given on the Quality Certificate. The below given figures are typical values for the product specifications.

Property	Value	Method
AWAC by weight 23°C, %9rh, 3d	% ≥16.0	EN 1279:2018
Loss on Ignition 540°C	% <1.7	EN 1279:2018
Laser Photometer 0.3 µm	part/m ³ <3*10 ⁸	PT.188
Gas desorption 70°C	ml/g <0.30	EN 1279:2018
Delta T fresh product 50gr/100ml	°C >50	PT.190
Delta T with 3 % LOI 50gr/100ml	°C >35	PT.190
Correct size ratio	% >95	PT.72
Bulk density	g/l 900±50	EN 1279:2018

All typical values are given for informational purposes only and are not to be interpreted as in-process specifications. Please read the technical bulletin "Adsorbents for Insulating Glass Units" issued by NEDEX.

APPLICATION
Preliminary statement

Prior to application it is necessary to read the Safety Data Sheet for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labelling, the relevant precautions should always be observed.

Pre-treatment

Before using of the desiccant the Delta-T value must be measured. The volatile diagram, delivered with each batch shows the initial loading of the molecular sieve approximately. If this value is higher than 1,7%-by weight (acc. EN1279-4:2018) , contact NEDEX Laboratory.

In case reading critical delta-T values near to the limits, the measurement of delta-T values should be repeated. In opened boxes please repeat delta-T measurement at the beginning of every working day. If the LOI value measured at 540 °Cel is higher than 3,0%-by weight do not use the material as it contains too much humidity (EN1279:2018). The residual content must be disposed. Read the SDS of the product for disposal conditions.

All surfaces, gloves, storage boxes for molecular sieve must be clean, dry and free from grease.

Molecular sieve must be opened safely and stored in opened packages in a system where air contact is minimized. Filling into the spacers can be done by hand or by automatic machines. The storage chamber of the machines should be emptied after working hours and the content must be disposed. The opened boxes should be used within 48 hours, if not the residual content must be disposed. After filling process into the spacer volumes the system must be sealed maximum within 3 hours.

The spacer internal geometry must have a smooth surface not to destroy the sieve granules. Spacers with high surface tension as plastic spacers may block filling process, check the filling weight of the sieve occasionally. The spacer perforation for automatic filling is very important. If the perforation is less than 4 holes/cm of spacer length, weigh the spacers before and after to control whether filling is performed correctly.

Check the section of the spacer. By warmedge spacers the section to fill the sieve may be not sufficient due to thickness of the spacer walls and geometry. Calculate the necessary molecular sieve quantity by multiplying the density of the sieve and section volume. If not sufficient fill 4 sides of IG unit, and/or order high density molecular sieve.

STORAGE

Frost-sensitivity

None. Prior to processing, the product must be brought to a suitable processing temperature.

Recommended storage temperature / conditions

0°C to +30°C. Must be protected from direct sunlight and/or thermal radiation. Storage at temperatures below 0°C and above +30°C does not cause damages to the product, but requires a control of initial moisture value. Extreme temperatures have as a result of extreme low and high pressures in the air-tight packagings of the molecular sieves, which increases the vapour permeation through the packaging materials and sealing.

Bigbags should be stored in closed areas protected against UV radiation of sun. This may degrade the bigbag material and can cause penetration of humidity into the adsorbent material.

Shelf life

18 months in metallic barrels and boxes, 9 months in bigbags

PACKAGING

Carton boxes	25 kgs, filled at 70-100°C, vacuum / no vacuum
Metallic barrels	160/170 kgs, filled at 70-100°C, no vacuum
Big bags	650 kgs, in textile with inliner fabricated big bags filled at 70-100°C, no vacuum

GRANULE SIZES

0.5-0.8 mm	automatic filling / for spacer width<8mm
1.0-1.5 mm	manual filling
1.4-2.0 mm	manual filling

CERTIFICATIONS

ISO	ISO 9001 registered / ISO 14001 registered / ISO 18001 registered
EN CERTIFICATION	EN 1279-2:2018 TÜV Rheinland-Report Nr. 89216155-02 and 89216155-03
	EN 1279-3:2018 TÜV Rheinland-Report Nr. 89216155-05 and 89216155-15
	EN 1279-4:2018 TÜV Rheinland-Report Nr. 89216381-01
OTHER	UNImark, GOST (Russia), EcoVadis

Hazard Indications Safety Recommendations Transport Regulations

See Safety Data Sheet

Disclaimer:

The information, specified in this Product Information, is based on careful laboratory tests and prevailing practical experience. The information is not binding, which is also generally true for our practical customer service, given verbally, in writing and by tests, since, on account of the diversity of applications and use, also including possible industrial property rights of third parties. Analysis results and all information regarding state and suitability of our products are only guidelines with no obligation on our part. In addition, our General Sales and Delivery Conditions are applicable.

Warranty Information:

NEDEX warrants only that its product will meets its technical specifications. NEDEX shall in no event be liable for incidental or consequential damage. NEDEX's liability expressed or implied is limited to the stated selling price of any goods found defective. This Technical Data Sheet supersedes all previous editions.