

## PRODUCT DESCRIPTION

NANOMOL-Z is a mixture of calciumoxide containing natural desiccants with synthetic zeolites and natural binders, like bentonites and polygorskits. The product is designed for a static water adsorption process with very low adsorption speed. With an optimized density can reach very good water adsorption capacity in a specific volume. If not in contact with liquid water, it has no chemical reactions to aluminium, steel, galvanized steel and plastics. If used in treated spacer profiles or profiles made of other materials; relevant trials must be carried out to ensure the product's suitability. Only for insulated glass manufacturing and air drying applications, for different applications please contact NEDEX Technical Department

## TECHNICAL SPECIFICATION

Technical characteristics	calciumoxide and zeolite based molecular sieve
Apperance	granule white-light grey
Density	880 g/lt $\pm$ 5%
Granule sizes	0,5 - 0,9 mm for automatic filling especially in bendable spacer Bars. 1, 0 - 1, 5 mm for semi-automatic filling and manual filling 1, 4 - 2, 0 mm for hand filling
Correct size ratio	>90 % -by weight
Ignition loss (LOI)	<2,5 %-by weight at 540° Celsius
% moisture	>22 (23°C, %50moisture, 30d)
Gasdesorption	at 70° Celsius for nitrogen/argon <50 ml for 250 gr molecular sieve by 50 gr molecular sieve in 50 gr water
Delta-T Value	>40° Celsius
Static Dust	digital photometer 695 nm with 100gr molecular sieve in 250 mL Volumetric flask and than to stuff with water 0,400 nm> 0,600nm<
Mechanical Dust	dust formation after 30min agitation <200 ppm for granule sizes<1, 0 mm <150 ppm for granule sizes>1, 0 mm
Static Electric	<100 V, for granule size <1, 0 mm <50 V, for granule size>1, 0 mm
Hardness by dinamometer	>6 N, for granule sizes <1, 0 mm >12 N, for granule sizes >1, 0 mm >15 N, for granule sizes >2, 0 mm

## 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 the Delta-T value must be measured. The volatile diagram, delivered with each party shows the initial loading of the molecular sieve approximately. If this value is higher than 2, 5%-by weight, 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.

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 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.

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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-sensitive

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

### Recommended storage temperature

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.

**Shelf life**

18 months original closed packaging in carton boxes

18 months original closed packaging in metallic barrels.

**PACKAGING**

Carton boxes	25 kg carton boxes, filled at 70-100°C, vacuum / no vacuum
Metallic barrels	150-160 kgs in cylindrical metallic barrels 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

**Hazard Indications Safety Recommendations Transport Regulations**

See Safety Data Sheet

**Please notice:**

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, we cannot assume any responsibility. Analysis results and all information regarding state and suitability of our products are only guidelines with no obligation on our part, unless they have been guaranteed expressly in writing. We advise determining the suitability of our products with respect to their suitability for the intended use and application technology by adequate testing. In addition, our General Sales and Delivery Conditions are applicable.

This Technical Data Sheet supersedes all previous editions.