

## PRODUCT DESCRIPTION

Zeolan-K is a mixture of 3A synthetic zeolites and natural binders. 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. 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	Mixture of 3A synthetic zeolites with natural binders
Appearance	granule white-light grey
Density	870 g/lit $\pm$ 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	>95 % -by weight
Ignition loss (LOI)	<1, 7 % -by weight at 540° Celsius
Tc-Value	>16% (23°C, %9 RH, 72 hr)
Gasdesorption	at 70° Celsius for nitrogen/argon <75 ml for 250 gr molecular sieve
Delta-T Value	by 50 gr molecular sieve in 50 gr water >35° Celsius
Static Dust	digital photometer 695 nm with 100gr molecular sieve in 250ml volumetric flask and then to stuff with water <0,300 nm
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	>8 N, for granule sizes <1,0 mm >15 N, for granule sizes >1,0 mm >20 N, for granule sizes >2,0 mm

## APPLICATION

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. 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 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 °C 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-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

24 months original closed packaging in carton boxes.

24 months original closed packaging in metallic barrels.

24 months original closed packaging in big bags.

## PACKAGING

Carton boxes

25 kg carton boxes, filled at 70-100°C, vacuum / no vacuum

Metallic barrels

150-160 kgs In cylindrical metallic barrels

without inliner, filled at 70-100°C, no vacuum

Big bags

650 kgs, in textile with inliner fabricated big bags filled at 70-100°C

### Hazard Indications Safety Recommendations Transport Regulations

See Safety Data Sheet.