

**Zeolan-K is an adsorbent for Insulating Glass Units with specifications according to EN 1279:2018.**

### PRODUCT DESCRIPTION

Zeolan-K is a mixture of 3A synthetic zeolites and natural binders. It is designed for a static water adsorption process with low adsorption speed. With its optimized density it can reach a very good water adsorption capacity in a specific volume. It has no chemical reaction to aluminium, stainless steel and plastics. It is produced only for insulated glass manufacturing. For different applications please contact NEDEX Technical Department.

### TECHNICAL SPECIFICATION

Zeolan-K 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
<b>AWAC by weight</b>	23°C, %9rh, 3d	%	≥16.0	EN 1279:2018
<b>Tc by weight</b>	23°C, %9rh, 3d	%	≥16.5	EN 1279:2018
<b>Loss on Ignition</b>	540°C	%	≤1.7	EN 1279:2018
<b>Photometer dust</b>		ppm	≤100	PT.99
<b>Gas desorption</b>	70°C	ml/g	<0.30	EN 1279:2018
<b>Correct size ratio</b>		%	≥95	PT.72
<b>Bulk density</b>		g/l	850±30	EN 1279:2018

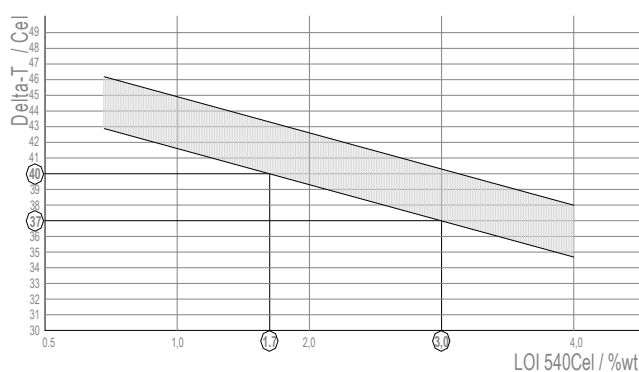
All typical values are given for informational purposes only and are not to be interpreted as in-process specifications.

Please read the technical bulletin "**Delta-T, AWAC, LOI for Zeolan-K**" 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.

**Before using** the desiccant, the Delta-T value must be measured withfrom Nedex specially developed kits. The Delta-T measurement is made by mixing **50gr** of product with **50ml** of water. If measured Delta-T values are closed to the limit, the measurement of the Delta-T values should be repeated. The diagram shows critical Delta-T values for fresh sieve and the sieve during production.



**Delta-T - LOI diagram at 540°C / % by weight**

**Filling process** - Molecular sieve must be opened safely and stored in a system with minimized air contact. Filling into the spacers can be done by hand or by half or full 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 8 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.

**Filling weight** - 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 use molecular sieve **with higher density**.

**Small particles** - To prevent entering of small particles into the cavity the perforation holes should have a maximum diameter of 150µm.

**Dust** - Check inner connection parts and pipes of automatic filling machines periodically for damages or abrasive accumulations of the sieve to prevent granules' destroy and the formation of dust. After using the contents of the barrel, vacuum the dust at the bottom of the barrel. Risk of visible dust near to filling points is increased by poor perforation and by high electrostaticity of polymeric spacers. Please remove visible dust manually.

**Condensation** - To prevent condensation on inner glass surfaces do not store the IGU at cold temperatures for the first 4 hours after sealing.

### 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 in original packaging** - 18 months in metallic barrels and boxes, 9 months in bigbags.

### PACKAGING

Carton boxes	25 kg, with or without vacuum
Metallic barrels	160/170 kg, without vacuum
Big bags	680 kgs, in textile with inliner fabricated big bags, without vacuum

### GRANULE SIZES

0.5-0.9 mm	for automatic filling / for spacer width <8mm
1.0-1.5 mm / 1.4-2.0 mm	for manual filling

### CERTIFICATIONS

ISO	ISO 9001-2015, ISO 14001-2015, ISO 45001-2018
EN CERTIFICATION	EN 1279-2:2018 TÜV Rheinland-Report Nr. 89216155-01 and 89216155-11
	EN 1279-3:2018 TÜV Rheinland-Report Nr. 89216155-07 and 89216155-17
	EN 1279-4:2018 TÜV Rheinland-Report Nr. 89216381-01
OTHER	RAL, Ceval, IGMA-IGCC(USA), GOST (Russia), EcoVadis, Aenor, UNI Mark, Applus

**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 meet 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.