



# NATERGY

**Shandong Natergy Energy Technology Co., Ltd.**

Leading supplier of IG desiccant

Since 2003



## CONTACT US

 **Tel:**0086-533-2318602     **E-mail:**sales@natergy.com  
 **Add:**Mintai Rd., Zibo Hi-New Tech Industrial Development Zone, Zibo Sd,  
China



## CONTENT

01/02 ABOUT NATERGY

03/04 OUR FACTORY

05/06 OUR PRODUCT

07/08 TECHNICAL SUPPORT

09/10 SINCERE SERVICE

11/12 MARKETING



Originating from the love and the respect for nature  
we are in pursuit of perfect quality  
with our environmental technology  
in order to protect more natural energy

## ABOUT NATERGY

SHANDONG NATERGY ENERGY TECHNOLOGY CO., LTD., founded in 2003 is the leading molecular sieve 3A manufacturer for insulating glass in China.

Natergy is an integrated company, it has its own production department, product research department, equipment research department and associated lab, owns more than 80 patents. With self-developed automatic production line and monitoring center, Natergy is equipped with annual output capacity of more than 60,000 tons.

With the certification according to EN 1279: 2018-7 by IFT and RAL, REACH registration of 1000+ MT and the approval official certified by CEKAL, IGCC/IGMAC and ISO9001/ISO14001/ISO45001. Natergy covers more than 30% market shares in the world. Its invention patents, Low-potassium type 3A zeolite molecular sieve and processing method thereof, have been appraised as international cutting-edge level.

As the molecular sieve 3A insulating glass desiccant expert, Natergy would be your reliable and capable consultant at any time.



## NATERGY SPIRIT

To be grateful and faithful



To be practical and innovatory



Joint confidence would hammer up our environmental mission



The top principle: Love



—  
Never ending for  
developing natural energy  
Let's work together for our beautiful planet  
.....

# COMPANY HONOR

# INTELLIGENT FACTORY



Adhering to the principle of quality priority, Natergy attaches great importance to technology development and innovation; currently it also has more than 80 patents. Natergy has independently developed a fully automatic and intelligent production line, which has realized the unmanned production from raw material feeding to finished product discharging in whole sealed section. The innovative on-line quality monitoring system can realize the real-time monitoring of production parameters and escorts the product quality.



REACH 1000+

IFT EN1279-4

IFT EN1279-2&3

CERTIFICATE OF INTELLECTUAL PROPERTY COMPLIANCE MANAGEMENT SYSTEM CERTIFICATION



ISO 9001:2015

ISO 14001:2015

ISO 45001:2018

RAL



IGCC/IGMAC

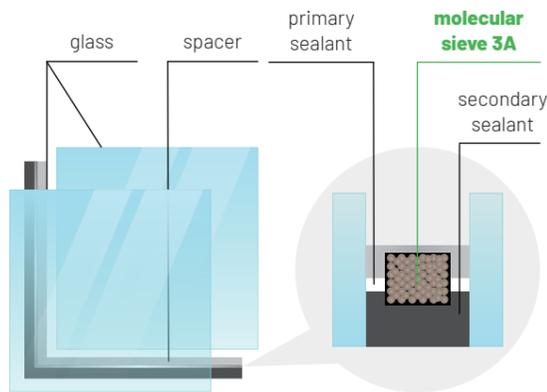
NATIONAL-LEVEL ENTERPRISE CERTIFICATION

CEKAL CERTIFICATION



# EXCELLENT QUALITY

## Product Introduction



3A molecular sieve as a special insulating glass desiccant, can accord with all performance indicators of insulating glass and not have any effect on its physical and chemical properties. It can continuously adsorb the water and the residual organic matter in the insulating glass, effectively prevent condensation, completely solve the distortion and broken problem caused by the expansion or contraction of insulating glass, ensure the life of glass shortest 30 years. So insulating glass desiccant can only choose 3A molecular sieve.

## Technical Parameter

### CEKAL&RAL CERTIFICATED Professional molecular sieve 3A

None of free calcium oxide, calcium chloride and other corrosive materials.

Size: 0.5-0.9mm 1.0-1.5mm 1.5-2.0mm

Item	Unit	Target
Bulk density	g/ml	≥0.70
Size ratio up to grade	%	≥96.0
AWAC	%(RH9%, 25°C)	≥16.0
Delta T value	°C (50g MS-3A/50ml H2O)	≥35
Nitrogen adsorption	ml/g (250ml-MS 3A, 70°C, 4hs)	≤0.3
Dust drops	NTU	≤50
LOI	%(540°C)	≤1.7

### Attention:

Do not unpack the goods until using. Avoid exposure in air for a long time.

The desiccant should be stuffed as rapidly as possible during filling spacer.

If one package is not used up, the surplus desiccant should be airproofly sealed.

The end user should know how to test the molecular sieve, especially Delta T and Nitrogen adsorption.

# PRODUCT ADVANTAGE

### ▶ No corrosiveness:

excluding calcium oxide, calcium chloride, 4A molecular sieve and other corrosive substances.

### ▶ Low dust level:

below 40 NTU, ensure the beauty and light transmission of insulating glass.

### ▶ High adsorption capacity:

maintain 16.5% effective adsorption capacity at 10% relative humidity. ensure that the moisture in the glass interlayer is fully absorbed, avoid condensation, ensure the thermal insulation of insulating glass.

### ▶ High compressive strength:

reduce the broken in the filling process, to avoid contaminating the glass.

### ▶ Low electrostatic load:

perfect flow ability by automatic filling.

### ▶ Qualified bulk density:

ensure that the usage amount of the desiccant is controlled within the most economical and reasonable range.

### ▶ Perfect capacity in controlling adsorption-speed:

keep the IG unit have continuous and strong adsorption capacity.



# HOW TO CHECK THE MOLECULAR SIEVE 3A

Test method	Test result	Conclusion	Harm or Advantage
1.Immerse the material in water (or grind and then immerse in water), agitate it. Test the PH value, and taste whether it is astringent. 2.Pour the transparent leachate into the Na <sub>2</sub> CO <sub>3</sub> solution to check whether there is precipitation. 3.Delta T test. 4.Gas desorption test (250ml desiccant, 70 C, 4hs). 5.Test the water adsorption under the relative humidity of 10%.	①PH value is in the range of 7-9. ②Taste it, not astringent. ③No precipitation, after mixing the solution. ④Delta T value is very low, even ≤10 C. ⑤The gas adsorption value is lower.	Pure clay desiccant	<b>Harm:</b> The IG unit will be frosted or condensed under the condition of low temperature and high humidity, eventually the lifespan of IG unit will be less than five years.
	①PH value is in the range of 7-9. ②Taste it, astringent. ③There is more precipitation after mixing the solution. ④Delta T value is 10 C-30 C	Mixed with corrosive calcium chloride.	<b>Harm:</b> Erode the spacer and sealant, there will be salting out or deliquescence, the lifespan of IG unit will be less than five years.
	①PH value is above 10. ②Taste it, astringent. ③There is precipitation after mixing the solution. ④Delta T value is above 30 C or extremely high.	Mixed with corrosive calcium oxide	<b>Harm:</b> Erode the spacer and sealant, there will be salting out or deliquescence, the lifespan of IG unit will be less than five years.
	①PH value is in the range of 7-9. ②Taste it, not astringent. ③No precipitation after mixing the solution. ④Delta T value is above 30 C. ⑤The gas desorption is more than 0.4ml/g.	Molecular sieve 4A	<b>Harm:</b> Generate the phenomenon of respiratory, cause gas leak of IG unit or explosion of glass pane, the lifespan of IG unit is severely affected.
	①PH value is in the range of 7-9. ②Taste it, not astringent. ③No precipitation after mixing the solution. ④Delta T value is between 30-45 C. ⑤Gas adsorption is less than 0.3ml/g. ⑥Reach adsorption balance within 12 hours (like 16.5%) under RH 10%.	Molecular sieve 3A (common quality)	<b>Advantage:</b> Completely meet the requirement of IG unit.
	①PH value is in the range of 7-9. ②Taste it, not astringent. ③No precipitation after mixing the solution. ④Delta T value is between 35-45 C. ⑤Gas adsorption is less than 0.3ml/g. ⑥Reach adsorption balance over 48 hours (like 16.5%) under RH 10%.	Molecular sieve 3A (high quality): Perfect capacity in controlling adsorption-speed	<b>Advantage:</b> Excellent quality molecular sieve 3A, it can prolong the lifespan of IG unit above 20% compared to that of common molecular sieve 3A.

# TEST EQUIPMENTS



## 3A Identifier

Flexibly test the gas desorption to justify molecular sieve 3A or 4A



## Delta T Apparatus

Convenient and quick to measure Delta T value

# PRODUCT PACKAGING



## carton box

25kg carton box



## steel drum

150kg steel drum



## fiber drum

140kg fiber drum



## big bag

600kg big bag

Any special requirement on package, please contact us.

# SERVICE PROCESS



## Pre-sale service

- Introduction of products and service
- Technical consultation
- Release the latest news of IG industry
- Sample testing or a trial order



## sale-service

- Signing contract
- Door to door delivery
- Products arrival consultation
- Training processing for free



## After-sale service

- 400-658-1550 Hot line for service
- Paying a return visit to our client irregularly
- Guaranteeing the quality valid within 2 years if package unopened
- Ensure the life of insulating glass shortest 30 years under normal double sealing condition.



# COMMUNICATION AND COOPERATION



GLASSTECH ASIA 2023



CHINA GLASS 2023

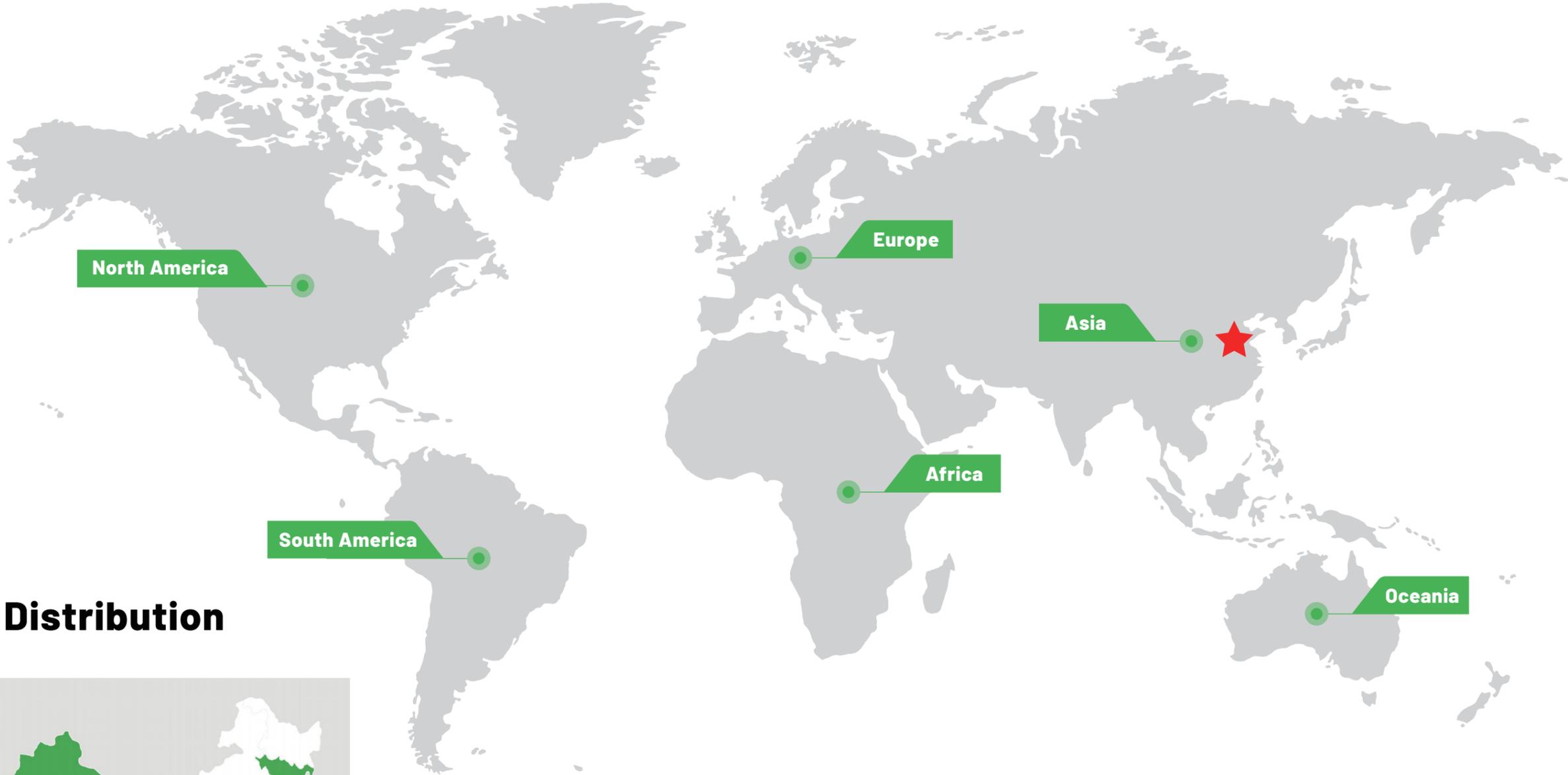


CHINA GLASS 2024



CHINA GLASS 2025

# MARKETING



## Warehouse Distribution



Natergy has established its comprehensive logistic system, centered in Zibo city, with more than 20 warehouses nationwide, which will ensure the in time delivery and make the fast response to the clients. Natergy serves more than 60 countries such as United Kingdom, Poland, Germany and so on. Natergy would be your reliable and capable consultant at any time.