EPOCHEMMIE CO., LTD

www.epochemmie.com

E-mail: sales@epochemmie.com epochemmie@163.com

DATA SHEET

Commodity: Molecular sieve 3 A
Composition: 0.6 K_2O: 0.40 Na_2O : 1 Al_2O_3 : 2.0 ± 0.1SiO_2 : x H_2O

Description: The 3A form is made by substituting potassium cations for the inherent sodium ions of the 4A structure, reducing the effective pore size to ~3Å, excluding diameter >3Å, e.g., ethane.

Applications:

Dehydration of unsaturated hydrocarbon streams, including cracked gas, propylene, butadiene, acetylene

Dehydration of polar liquids such as methanol and ethanol

Adsorption of molecules such as NH_3 and H_2O from a N_2/H_2 flow. Considered a general-purpose drying agent in polar and nonpolar media

Dehydration of natural gas, if COS minimization is essential, or a minimum co-adsorption of hydrocarbons is required.

Dehydration of liquid alcohol with Z3-01 / 1-2 mm beads

Static, (non-regenerative) dehydration of insulating glass units, whether air filled or gas-filled.

Dehydration of refrigerants (e.g. R22, R134a etc)

Regeneration:

1. Dehydration: At 200-350℃ and in pressure of 0.3~0.5kg/cm3, let a dryer gas goes through the sieve bed for 3~4hours. As the temperature in outlet at 150~180℃, let the bed cool off
2. Removal of organic components: Replace the organic components with steam, then dehydrate

Specification:

Typical physical & Chemical characteristics

Specification	Balls		Pellets	
Type	3ABI	3ABII	3API	3APII
Bead size（mm）	1.5-1.7	3-5	1.5-1.7(1/16”)	3.0-3.3(1/8”)
Bulk density(kg/m^3） min	680	680	640	640
Crushing strength (N)min	44	59	20	20
Attrition loss（%Wt） max	0.4	0.4	0.25	0.60
Moisture adsorption(%) min	20	20	20	20
Static ethene adsorption(mg/g) max	3.0	3.0	3.0	3.0