

Table of data

Zeolite Products, Arnhem, The Netherlands

Registration No. PDV: PDV 113241

Registration No. VWA: 27268778

Safe Feed Supplier, FAMI-qs certificated product.



FAMI-qs

SAFE
FEED

www.zeolite-products.com

NAME TITLE OF THE MATERIAL E 568

Name of material	Natural zeolite
Chemical name	Hydrated Calcium Aluminosilicate
Mineralogical form	Clinoptilolite, of sedimentary origin, E 568
Chemical type	Molecular sieve
Empirical formula	$(Ca,K_2,Na_2,Mg)_4Al_8Si_{40}O_{96} \cdot 24H_2O$
CAS No.	12173-10-3
EC No.	215-283-8

CHEMICAL COMPOSITION

Silicon Dioxide	SiO ₂	65 - 72%	Sodium Oxide	Na ₂ O	0,3 - 0,65%
Aluminum Oxide	Al ₂ O ₃	10 - 12%	Titanium Dioxide	TiO ₂	0,0 - 0,1%
Calcium Oxide	CaO	2,5 - 3,7%	Manganese Oxide	MnO	0,0 - 0,08%
Kalium Oxide	K ₂ O	2,3 - 3,5%			
Iron Oxide	Fe ₂ O ₃	0,8 - 1,9%	L.O.I. Humidity		9 - 12 %
Magnesium Oxide	MgO	0,9 - 1,2%	Si / Al		5,4 - 6,0

MINERALOGICAL COMPOSITION

Clinoptilolite	88 - 95%	Cristobalite	0 - 2%
Feldspars	3 - 5%	Muscovite	0 - 3%
Montmorillonite	2 - 5%	Dioxins & - PCB's :	max. 1,5 ng 2,3,7,8-TCDD TEQ/kg
		Tested on heavy metals and samonella	

PHYSICAL-MECHANICAL DATA

Softening point	1150 °C	Water Absorption	42 - 50 %
Melting point	1300 °C	Oil Absorption (ml/100g)	57
Bulk Density	650 - 850 kg/m ³	Abrasion (mg/100g)	87
Porosity	45 - 50 %	Single Point Surface Area	39 m ² /g
Effective diameter of pores	0,4 nm (4 angstrom)	Micropore Area	11 m ² /g
Mohs hardness	2 - 3	Mesopore Area	29 m ² /g
Appearance and smell	ivory-white-without smell		
pH	7,0 - 8,0		

ION EXCHANGE PROPERTIES

Total CEC:	1,5 - 1,9 mol/kg
Major Exchangeable:	Rb, Li, K, Cs, NH ₄ ⁺ , Na, Ca, Ag, Cd, Pb, Zn, Ba, Sr, Cu, Hg, Mg, Fe, Co, Al, Cr.

Selectivity: Cs⁺ > NH₄⁺ > Pb²⁺ > K⁺ > Na⁺ > Ca²⁺ > Mg²⁺ > Ba²⁺ > Cu²⁺, Zn²⁺

Primary Adsorbing Gases CO, CO₂, SO₂, H₂S, NH₃, HCHO, Ar, O₂, N₂, H₂O, He, H₂, Kr, Xe, CH₂OH, Freon

Information herein is accurate to the best of our knowledge, but may be subject to change without notice. Suggestions are made without warranty or guarantee to results. Before using, user should determine the suitability of the product for its intended use and user assumes the risk and liability in connection herewith.

DATA ON REACTIVITY

Stability against acids	79,50%	Hazardous decomposition	none
Thermal stability	up to 400 °C	Hazardous polymerisation	it does not occur
Solubility in water	0		
Plasticity	Minor		
Solubility	None		