NEPHELINE N45 /N75

Nepheline Syenite

Features & Benefits

Maastricht-NL

Nepheline ceramic fluxes are produced from nepheline syenite, a naturally occurring, silica deficient sodium-potassium alumina silicate. The higher total alumina and alkali contribution available from nepheline syenite produces ceramic ware with greater impact and flexural strength and improved resistance to the stresses of thermal extremes and mechanical shock.

The lower melting eutectic and increased fluxing power of **Nepheline** make possible body compositions which mature at temperatures as low as cone 3-5. It is the higher alkali to alumina ratio and greater chemical reactivity that accelerate to melt and promote a faster maturation. **Nepheline** will increase the rate of vitrification over a wider firing range, ensure smooth glazed surfaces even at lower temperatures and help to reduce the deformation typically encountered in fast fire cycling. When the objective is improved translucency, **Nepheline** will combine with and consume the available free crystalline silica to create highly translucent wares.

Granulometric Data & Physical Characteristics

Mean values. These do not represent a specification.

		N45	N75	Method
> 100 µm	%	traces	Traces	Alpine air jet
> 45 µm	%	0.5	5	Alpine air jet
D10	µm	3.0	4	Malvern laser diffraction
D50	µm	13	20	Malvern laser diffraction
D90	µm	33	54	Malvern laser diffraction
pH	-	9-11	9-11	
Bulk Density	g/cm^3	0.80	0.95	He-Pycnometer
Loss on ignition	%	0.5	0.5	Furnace 1050 °C
Melting point	°C	1020	1020	

Chemical Analysis (XRF) %

Mean values. These do not represent a specification.

	Weight %	Method
SiO_2	54.4	XRF
Al_2O_3	24.7	XRF
Na_2O	10.5	XRF
K_2O	8.5	XRF
Fe_2O_3	0.1	XRF
CaO	1.5	XRF
MgO	0.02	XRF

Availability

Maastricht, Netherlands
Paper bags (20 kg)
Big bags
Bulk

For Product Information & Customer Service

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The technical data presented here is for marketing purposes only and is not contractually binding, the data herein is determined using Sibelco standard test methods. Since the product is based upon a naturally occurring material, we reserve the right to change this data when necessary. Safety information accompanying this product is available in the form of an SDS. All sales are undertaken strictly in accordance with our “General Conditions of Sale”, available upon request, or by a written sales agreement duly signed by us.

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