



# Nepheline Syenite

## Glass Grade

APGlas is glass-grade nepheline syenite, which is a naturally occurring, quartz-free, alkaline alumina silicate.

In glass application, nepheline syenite primarily serves as an excellent fluxing agent and has the following advantages:

- Higher alumina content which improves matrix formation, stabilisation and physical resistance
- Higher alkali volume and improves fluxing, which lowers the melting temperature of the batch and reduces the quantity of high cost soda ash to be added
- Higher alkali/alumina ratio and lower fusion, which increase savings in raw materials handling, storages and energy used in production
- No free silica

Chemical Analysis	APGlas 13	APGlas 20
SiO <sub>2</sub>	~ 60.0%	~ 60.0%
Al <sub>2</sub> O <sub>3</sub>	~ 22.0%	~ 22.0%
Fe <sub>2</sub> O <sub>3</sub>	0.13% (± 0.02%)	0.20% (± 0.02%)
TiO <sub>2</sub>	~ 0.04%	~ 0.04%
Na <sub>2</sub> O	~ 9.50%	~ 9.50%
K <sub>2</sub> O	~ 6.00%	~ 6.00%
CaO	~ 0.55%	~ 0.55%
MgO	~ 0.10%	~ 0.10%
L.O.I	~ 1.80%	~ 1.80%

Particle Size Distribution	FinGlas 13	FinGlas 20
+ 850 µm (20 Mesh)	Trace	≤ 0.5%
+ 600 µm (30 Mesh)	≤ 3.0%	≤ 15.0%
- 106 µm (140 Mesh)	≤ 10.0%	≤ 5.0%
AFS	~ 55-70	~ 45-60
Moisture	≤ 0.3%	≤ 1.0%