

TECHNICAL DATA SHEET

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Spodumene Concentrate, SC 7.2 premium

CAS-No. 1302-37-0

Molecular Formula $AlLi(SiO_3)_2$

Product Number 402211

APPLICATION

Spodumene is used in glasses, glass-ceramics, porcelain enamels, whitewares, and glazes due to the powerful fluxing properties of lithia. It possesses a very low thermal expansion and reduces the viscosity of the glass mass. It contributes to brilliancy and strength of the glass. Spodumene is also used in metallurgical applications, i.a. in continuous casting powders, anti-veining agents, and as additive in foundry feeder production.

FURTHER INGREDIENTS

Feldspar

CAS-No. 68476-25-5

EC-No. 270-666-7

Quartz (SiO₂)

CAS-No. 14808-60-7

EC-No. 238-878-4

SPECIFICATION

	Specification	Method of Analysis
Li ₂ O	min. 7.2 %	AAS
Al ₂ O ₃	min. 25.0 %	XRF
SiO ₂	min. 62.5 %	XRF
Fe ₂ O ₃	max. 0.12 %	XRF
Na ₂ O	max. 0.35 %	XRF
K ₂ O	max. 0.30 %	XRF
P ₂ O ₅	max. 0.25 %	XRF
CaO	max. 0.10 %	XRF
LOI (1000 °C)	max. 0.5 %	gravimetric

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PHYSICAL PROPERTIES

Appearance	granular
Color	white to beige
Melting point/ range	from 1,375 °C
Density	3.1 g/cm ³
Bulk density	1,500 kg/m ³
Water solubility	(immiscible)

Grain Size	Grain Size	Guaranteed	typ.
	<500 µm	100 %	
	>212 µm	max. 18%	11 %
	>125 µm		48 %
	>90 µm		69 %
	>75 µm	min. 60 %	75 %

Additional Physical Properties Spodumene is a mineral with the general formula [LiAl(Si₂O₆)]

Major Composition	Weight %
Spodumene	~ 94 %
Quartz	~ 5 %
Feldspar	~ 1 %

HANDLING & STORAGE

Handling	Observe official safety regulations
Storage	Store in dry conditions as material is produced and consumed as a dried product. Do not store together with volatile chemicals as they may be absorbed into the product.

TRANSPORT & PACKAGING

ADR
Not regulated as a dangerous good

Packaging

- bulk in silo trucks / tipping trucks / trailers
- big bags (1000 kg) on pallet
- 25 kg paper bags on pallets of 1000 kg

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OTHER INFORMATION

Further Related Documents Safety Data Sheet

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