

## Firelite<sup>®</sup> LOD SWHT

**Product Data Sheet** 

## **Product Description**

An insulating concrete based on low bio-persistent fibres for service up to 1200°C (2200°F), expressly designed to withstand thermal shock; it has extremely low thermal conductivity.

Particularly recommended for the following applications: by casting: special shapes to complete fibre lining of heaters and furnaces; kiln car tops for rapid firing in ceramic industry; by trowelling: lining of launders and distributors in primary aluminium industry; lining of ladles in secondary aluminium industry.

Properties	Firelite LOD SWHT
Region of Manufacture	Europe
Bond Type	Hydraulic
Method of Application	Cast
Maximum Service Temperature, °C (°F)	1200 (2200)
Estimated weight of dry material/m³ of construction, kg (lb)	948 (59.2)
Water Addition, % by weight	72
Maximum grain size, mm	10
Packaging in bags, kg (lb)	25 (55)

Whilst the values and application information in this datasheet are typical, they are given for guidance only. The values and the information given are subject to normal manufacturing variation and may be subject to change without notice. Morgan Advanced Materials – Thermal Ceramics makes no guarantees and gives no warranties about the suitability of a product and you should seek advice to confirm the product's suitability for use with Morgan Advanced Materials - Thermal Ceramics.

## Firelite<sup>®</sup> LOD SWHT





Density, kg/m³ (pcf), ASTM C134		
oven dried, 110°C (230°F)	1030 (64.27)	
after 5 hours firing, 815°C (1500°F)	940 (58.66)	
Cold crushing strength, MPa (psi), ASTM C133		
oven dried, 110°C (230°C)	2.2 (319)	
after 5 hours firing, 815°C (1500°F)	1.8 (261)	
Permanent linear change, %, ASTM C113		
after 5 hours firing, 815°C (1500°F)	-0.3	
Thermal conductivity, W/m•K (BTU•in/hr•ft²•°F), ASTM C201/417		
200°C (392°F)	0.17 (1.18)	
400°C (752°C)	0.20 (1.69)	
600°C (1112°F)	0.22 (1.53)	
800°C (1472°F)	0.24 (1.67)	
Chemical composition, %		
Alumina, Al <sub>2</sub> O <sub>3</sub>	35.7	
Silica, SiO <sub>2</sub>	38.84	
Calcium Oxide, CaO	19.77	
Ferric Oxide, Fe <sub>2</sub> O <sub>3</sub>	2.97	
Alkali as, MgO+K <sub>2</sub> O+Na <sub>2</sub> O	1.39	
Titanium Oxide, TiO <sub>2</sub>	0.85	

## Storage and Shelf Life

- Should be stored in dry conditions, unopened packaging on pallets. Do not store on ground. Keep out of rain and damp conditions.
- Shelf life is of twelve months with original packaging, double shrink film and dehydrating agent provided if the monolithic is stored under these recommended conditions.

Whilst the values and application information in this datasheet are typical, they are given for guidance only. The values and the information given are subject to normal manufacturing variation and may be subject to change without notice. Morgan Advanced Materials – Thermal Ceramics makes no guarantees and gives no warranties about the suitability of a product and you should seek advice to confirm the product's suitability for use with Morgan Advanced Materials - Thermal Ceramics.