LIGNACITE
Sustainable Masonry

MATERIAL SAFETY DATASHEET

www.lignacite.co.uk

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1	**Product name:**	Ash GP, Fibo 850/950, Lignacite, Lignacrete and Lignalite precast concrete aggregate building blocks.
1.2	**Identified uses:**	A range of aggregate blocks is manufactured in various sizes, strengths and densities for use in construction (building). They should be used in accordance with Lignacite Ltd's technical literature (www.lignacite.co.uk) and relevant National and European masonry standards and codes of practice.
1.3	**Supplier:**	Lignacite Ltd, Norfolk House, High Street, Brandon, Suffolk, IP27 0AX Tel: 01842 810678 Email: sales@lignacite.co.uk

SECTION 2: HAZARD IDENTIFICATION

2.1	**Classification of the mixture classification according to Regulation (EC) No 1272/2008**	The product is not classified according to CLP regulation.
2.2	**Label Elements:**	Not applicable/void.
2.3	**Other hazards:**	Dust is not generated under normal use but inhalation of high concentrations of dust must be avoided if generated by mechanical treatment, (i.e., cutting, grinding or surface treatment) above exposure limits given in section 8. The dust may also contain some respirable free crystalline silica that may be inhaled and remain lodged in the alveoli areas of the lungs. The long-term effect of prolonged exposure can be silicosis, which can lead to lung cancer. Under Article 31 of the REACH regulations, it is the responsibility of the producer of a substance/mixture to provide a safety datasheet if it is considered dangerous. These products are not classified as dangerous. However, it is still necessary to comply with COSHH requirements, which this Safety Datasheet aims to achieve.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1	**Substances:**	CAS 65997-15-1 Portland Cement EINECS 266-043-4
3.2	**Additional information:**	Products are manufactured from cement (partial cement replacements may be used) and depending on product type, various types of lightweight and dense aggregates. In addition, Lignacite blocks are manufactured with a proportion of graded wood particles.

SECTION 4: DESCRIPTION OF FIRST AID MEASURES

4.1 Description of first aid measures:

After Inhalation: Remove to fresh air. If irritation of the respiratory tract persists, seek medical advice.
After Eye Contact: Irrigate immediately with plenty of water and seek medical attention immediately.
After Skin Contact: Wash with soap and water. If irritation persists, seek medical advice.
After Ingestion: Do not induce vomiting. Drink plenty of water and seek medical attention.

4.2 Symptoms and effects:

Eye Contact: Any dust that may be generated could cause irritation and discomfort by abrasion, similar to "grit in the eye".
Skin Contact: Prolonged or repeated contact with dust or rough surfaces may cause dryness and abrade the skin.
Manual Handling: Blocks may vary in weight and size. The manual handling risk should be assessed to minimise injury; poor posture when bending or twisting may cause strain.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Not flammable. Use appropriate extinguishing media for the combustible materials involved in the fire.

5.2 Special hazards:

Product is inert, non-flammable and non-combustible.

5.3 Advice for firefighters:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Protective equipment:
Firefighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode.

Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Additional information:
Collect contaminated firefighting water separately. It must not enter the sewage system. Dispose of fire debris in accordance with official regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions:

- Keep away unnecessary and unprotected personnel.
- Put on appropriate personal protective equipment (see section 8).
- Avoid the formation of airborne dust.
- Ensure adequate ventilation.
- Correct hygiene procedures should be followed before smoking or consuming food and drink.

6.2 Environmental precautions:

Do not allow disposal into drains or sewage systems.

6.3 Clean-up methodology:

Block waste can be recycled or disposed of with normal construction waste, in accordance with national and local authority regulations.

If dust is created, it should be either dampened down or picked up mechanically using a vacuum cleaner, fitted with a HEPA (high energy efficient particulate air) filter.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

Handling of blocks should be undertaken in accordance with HSE Construction Sheet No. CIS77 "Preventing injury from handling heavy blocks" and in accordance with the Manual Handling Operations Regulations 1992 (as amended).

This concludes that there is a high risk of injury to individuals who repetitively handle blocks in excess of 20kg. Where practicable, mechanical handling equipment should be used to transport blocks to places of work.

7.2 Conditions for safe storage:

Both block packs may be stacked on suitable hard and level surfaces, to a maximum of 3 packs. If packs are to be stacked on uneven ground, stacking should be restricted to a maximum height of 2 packs.

Consideration of handling equipment's suitability for terrain and safety limits should also be given. Hand-operated pallet trucks may not be suitable unless pallets specific for this purpose are employed and loads do not exceed the limits of the pallet truck or its operator(s) in handling the load.

Care should be taken when opening packs that are wrapped or banded, to ensure that items do not fall or otherwise endanger persons handling the blocks or those nearby.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Workplace exposure limits (WEL):

Airborne dust can be generated when the blocks are mechanically worked (e.g., cutting or grinding). The following workplace exposure limits for airborne dust are given in accordance with HSE Guidance EH40/2005.

Total dust: WEL 10mg/m3 (8 Hours TWA).
Respirable dust: 4mg/m3 (8 Hours TWA).
Crystalline Silica: 0.1mg/m3 (8 Hours TWA).

8.2 Exposure controls:

Material may be rough in texture. Loose particles and dust that may arise from handling these products may cause irritation if allowed to enter the eyes or respiratory tract. Suitable personal protective equipment should be used.

Eye/face protection:

If dust is generated, wear tight-fitting goggles.

Skin protection:

Wear gloves to prevent prolonged skin exposure if physically handling the product to avoid abrasion and provide grip on the block when handling.

Wear suitable respiratory protection equipment when mechanical treatment (e.g., cutting or grinding) or surface treatment is carried out and if exposure to atmospheric dust levels above the workplace exposure limits is likely.

Respiratory protection:

Use approved dust respirators to EN149, category FFP3 or an air-fed respiratory with helmet, fitted with a P3 filter for heavy exposure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	**Chemical properties:**	Form:	Blocks are available in solid or hollow form.
		Colour:	This varies according to the product types and factory of origin.
		Odour:	None.
		pH:	N/A
		Bulk Density:	Varies according to product type. The density range of our blocks is 800-2100 kg/m^3.
		Solubility:	N/A
		Auto Flammability:	N/A
		Lower Explosive Limit (LEL):	N/A
9.2	**Other information:**		None

SECTION 10: STABILITY AND REACTIVITY

10.1	**Stability:**	The product is chemically stable.
10.2	**Reactivity:**	No hazardous chemicals are known to be formed during the use of this product.
10.3	**Conditions to avoid:**	None. This is a stable product under recommended storage and handling conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Toxicological effects:	Skin:	Abrasive, may cause skin irritation.
		Eyes:	Abrasive, discomfort and irritation.
		Ingestion:	Very unlikely.
		Inhalation:	Mechanically machined concrete products (hardened concrete is cut, drilled, milled or planed) will release dust, which may contain particles of silica or quartz. Inhalation of concrete may irritate the airways. Inhalation of dust containing silica or quartz over a prolonged period of time can give rise to silicosis/pneumoconiosis, a disease of the lungs, leading to impaired breathing. The quartz content of the product will vary and is related to the type of aggregate used in the production of the concrete. Advice on the quartz content and other chemical information is available from the supplying unit.

SECTION 12: ECOLOGICAL INFORMATION

12.1	**Environmental:**	The overall environmental impact is regarded as insignificant. The product is made using virgin and recycled materials.
12.2	**Mobility:**	Non-soluble.
12.3	**Biodegradability:**	Not biodegradable.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Disposal arrangements:	Dispose of surplus material and packaging via an authorised waste contractor in accordance with national and local authority regulations. Waste should be classified as EWC 17 01 01 – Non-hazardous building waste.

SECTION 14: TRANSPORTATION INFORMATION

14.1	**UN No.:**	None.
14.2	**IMO Classification:**	None.
14.3	**ADR Classification:**	None.
14.4	**IATA Classification:**	None.
14.5	**Other Information:**	Treat as a non-hazardous product.

SECTION 15: REGULATORY INFORMATION

15.1 EU regulatory information:

The product is a mixture according to REACH and is not subject to registration.

The product is not subject to labelling according to Regulation (EC) No. 1272/2008.

A chemical safety assessment is not required and therefore has not been carried out.

15.2 National regulatory information

The information contained within this safety datasheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

SECTION 16: OTHER INFORMATION

16.1 Abbreviations and Acronyms:

CLP – Classification, Labelling and Packaging Regulations (EC) No. 1272/2008.
WEL – Workplace Exposure Limit.
TWA – Time Weighted Average.
ADR – European Agreements on the transport of Dangerous Goods by Road/Railway.
IATA – International Air Transport Association.
IMO – International Maritime Organisation.

16.2 Guidance Notes:

- HSE Construction Sheet No. CIS77 – Preventing injury from handling heavy blocks.
- Workplace Exposure Limits (Fourth Edition) – EH40/2005.
- Local Exhaust Ventilation (Third Edition) – HS(G) 258.
- HSE Construction Sheet No. CIS36 – Construction Dust.
- Dust – General Principles of Protection – EH44.
- Respirable Crystalline Silica – EH75-5.
- Waste Management – The Duty of Care.
- The European Waste Catalogue (EWC).

16.3 Disclaimer:

The information on this datasheet reflects the currently available knowledge and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified in the technical guidance literature. Any other use of the product, including the use of the product in combination with any other product or other processes, is the responsibility of the user.

It is implicit that the user is responsible for determining appropriate safety measures and for applying the legislation covering his/her own activities.

This version of the Material Safety Datasheet supersedes all other previous versions.