



Material Safety Data Sheet

Product Name: Cenosphere

Section 1-Product Information

Identification : Hollow Sphere
Synonym's : Cenosphere, Hollow ceramic microspheres
CAS No : 68131-74-8
HS Code : 2621900000

Section 2-Composition, Information on Ingredients

Composition: Hollow microsphere of Alumino Silicate extracted from Fly Ash (PFA). Not considered to have any hazardous components.

Section 3-Hazards Identification

The lightweight nature of the material can result in air borne dust if spillage occurs. This in turn can lead to severe eye irritation and impaired lung function if prolonged exposure at high concentration is experienced. Product is not respirable in delivered state and does not require hazard warning labels in accordance with directive 67/548/EC.

Section 4-First Aid Measure

Eye contact : Wash eyes copiously with clean water and if irritation persists seek medical advice.
Skin contact: Remove from skin by washing thoroughly with soap and water.
Ingestion : If ingested, drink plenty of water and seek medical advice.
Inhalation : Remove to fresh air. Ensure supply of fresh air.

Section 5-Fire fighting procedure

Material is non-combustible and produces no Hazardous products in a fire situation.

Section 6-Accidental Release Measure

Personal precautions: Avoid contact with skin, eyes and clothing. Avoid inhalation or ingestion. Refer to section 8.
Environmental precautions: Alert neighbours of possible eye and respiratory irritation risk. Prevent entry into canals, drains and other water courses. Only allow into surface water drains fitted with suitable filters.
Method for cleaning up: Spillages should be removed immediately by a vacuum system. If not immediately available, spray with clean water and remove mechanically avoiding entry to water courses. Send material in suitable sealed containers for recovery or disposal.



Section 7-Handling and Storage

Handling: Avoid generating airborne dust wherever possible. Provide good ventilation in working areas (provide local dust extraction where necessary). Protective equipment must be used if exposure limits are exceeded.

Storage: Product should be stored in closed containers, bags etc.

Section 8-Exposure control/Personal protection

The exposure limits for Fly-Ash Cenosphere are:

Total inhalable dust – 10mg/m³ 8hr TWA

Respirable dust – 4 mg/m³ 8hr TWA

Engineering measures such as closed conveying systems, dust extraction equipment and vacuum cleaning equipment should be used wherever possible to prevent dust generation and exposure.

Respiratory protection: If workplace exposure limits are exceeded, suitable respiratory protection equipment must be used. P2 dust masks are suitable.

Hand protection: Wear chromed cotton gloves.

Eye protection: Wear eye protection complying with BS 2092 class D or EN166 class4.

Skin protection: Wearing of gloves, overalls, boots and helmets is advised.

Section 9-Physical Chemical Properties

Appearance : Solid, fine particle powder of grey, off-white or grey/brown colour.

Odour : A slightly earthy odour may be present.

pH-Value : 7-9 in a 50% solids concentration.

Boiling point : N/A

Melting point : 1200-1400 °C

Flash point : N/A

Auto flammability : N/A

Explosive properties: None

Oxidising properties: N/A

Vapour pressure : N/A

Relative density : 0.60 – 0.85 g/cc

Solubility:

a) **Water solubility:** Negligible

b) **Fat solubility:** Negligible

Partition coefficient: N/A

Other data : Product melts with no change in chemical composition.

Section 10-Stability and Reactivity

Conditions to avoid: None

Materials to avoid: None

Hazardous decomposition products: None



Section 11-Toxicity Information

Fillite has a typical particle size of 20-300 microns and is therefore classified as a nuisance dust. Cenosphere contain crystalline silica at typical levels of 1.5% although all crystalline material is bonded into the glassy shell. Care should therefore be taken to avoid milling or grinding the material which may generate respirable particles. Prolonged exposure to high levels of respirable crystalline silica is considered a possible cause of silicosis that may lead to lung cancer. The nature of Cenosphere however mean they are considered harmless in the as-delivered state based upon 40 years of exposure experience.

Section 12-Ecological Information

Environmentally benign. Do not discharge into canals, drains or water courses.

Section 13-Disposal Considerations

No special requirements for disposal at licensed facilities are in force. Fly-ash Cenosphere are included in the European waste catalogue (code number 10 01 02) but are classed as non-hazardous in the EC hazardous waste list (directive 94/904/EC).

Section 14-Transport Information

Under CPL (Classification, packaging and labeling of dangerous preparations) regulations, fly-ash cenospheres are classed as non-hazardous and can be safely transported by road, rail sea and air.

Section 15-Regulatory Information

Material does not require hazard warning labels. Non-hazardous under European waste catalogue (directive 2000/532/EC).

User should refer to any national measures that may be relevant with regard to health & safety at work, occupational exposure limits, waste management, control of hazardous substances, consumer protection, environmental protection etc.

Section 16-Additional Information

HS Commodity code: 2621900000 and 6806900000 are both suitable. CAS No: 68131-74-8 ashes (residues) with corresponding EINECS No: 268-627-4 and 93924-19-7 ashes (residues) Cenosphere with corresponding EINECS No: 300-212-6 are both suitable.

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