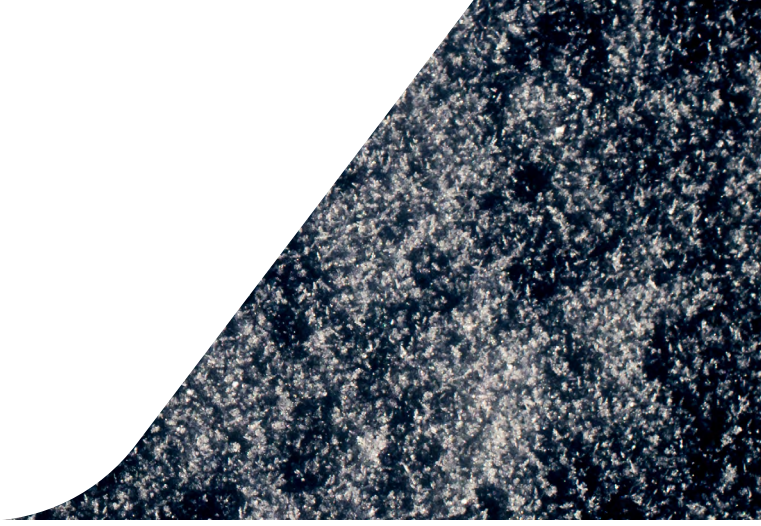
FLY ASH AND PFA
HEALTH AND SAFETY DATASHEET



Ashes registered under the REACH Registration for "JS_Ashes (residues), coal" are not classified as hazardous and therefore no SDS is mandatory as none of the criteria apply in accordance with Article 31 of REACH. To avoid confusion no Safety Data Sheet (SDS) has been prepared by CEMEX UK. In place of a SDS this Safety Information Sheet (SIS) is offered.

Section 1: Fly Ash and PFA
Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

931-322-8 JS_Ashes (residues), coal.

REACH Registration Number: 01-2119491179-27-xxxx

Synonyms: Fly Ash, Pulverized Fuel Ash, PFA

Trade Names: Not applicable.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses:
Mineral raw material and construction material in bound and unbound applications (e.g. cement, concrete addition, etc).

1.3 Details of the supplier of the safety datasheet

CEMEX UK Operations Ltd
CEMEX House
Evreux Way
Rugby
Warwickshire, CV21 2DT

Product Helpline
0800 667 827 (Available 9am-5pm Mon-Fri)
gb-enquiries@CEMEX.com
www.CEMEX.co.uk

1.4 Emergency Telephone Number

0800 667 827 (Available 9am-5pm Mon-Fri)

01932 568833 (Available outside normal office hours)
N.B. Limited to Escalation of Issue

Section 2: Hazard information

2.1 Classification of the substance or mixture

According to criteria of Directive EC 67/548/EEC and Regulation (EC) 1272/2008 the substance is not classified as hazardous.

2.2 Label elements

According to criteria of Directive EC 67/548/EEC and Regulation (EC) 1272/2008 the substance does not need to be labelled.

2.3 Other hazards

No special remarkable hazards.

Section 3: Composing/information on ingredients

3.1 Substances

EC No: 931-322-8
EC name Ashes (residues), coal
Purity: 100 % (UVCB)
Synonyms: see 1.1

Additional information:
Substance is a UVCB-substance composed of glassy/ amorphous material and mineral phases. Its chemical composition is preferably analysed as elements and reported as the mass percent of each equivalent oxide, e.g. SiO2, Al2O3, Fe2O3, CaO.

3.2 Mixture

Not applicable.

Section 4: First Aid measures

4.1 Description of First Aid measures

Inhalation: No particular measures required.

Ingestion: Drink plenty of water (in case you feel unwell consult doctor).

Skin Contact: Dust has to be rinsed with water (if irritation persists contact doctor).

Eye contact: Dust has to be rinsed with water (if irritation persists contact doctor).

Notes for the doctor: No allergic reactions known, mineral dust.

4.2 Most important symptoms and effects, both acute and delayed

Skin and eye irritation might occur

4.3 Indication of any immediate medical attention and special treatment needed

Not applicable.

Section 5: Fire-fighting measures

5.1 Extinguishing media

The substance is not combustible. Use any means suitable for extinguishing surrounding fire

5.2 Special hazards arising from the substance or mixture

Not applicable.

5.3 Advice for Fire Fighters

Not applicable.

Section 6: Fire-fighting measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid creating airborne dust wherever possible (see 6.4).

6.2 Environmental Precautions

Avoid creating airborne dust wherever possible (see 6.4).

6.3 Methods and Material for Containment and Cleaning Up

Spills: Sweep together and containerize for reclamation or disposal. Dry vacuum or wet cleaning with mechanical devices may be used to avoid dust dispersal.

6.4 Reference to Other Sections

For personal protection see section 8.
For waste disposal see section 13.

Section 7: Handling and storage

7.1 Precautions for Safe Handling

- Avoid creating airborne dust wherever possible;
- Do not eat, drink and smoke in working areas;
- Wear appropriate protective clothing (e.g. goggles, gloves);
- Avoid prolonged skin contact;
- Wash hands after work

7.2 Conditions for Safe Storage, Including any Incompatibilities

No special requirements.

7.3 Specific End Use(s)

Not applicable.

Section 8: Exposure controls

8.1 Control Parameters

See UKQAA COSHH safety datasheet – Technical Datasheet 9.0
[The current occupational exposure limits for respirable dust in the European Union (3-10 mg/m³) should apply.
(CSR – Discussion, p. 79)]

8.2 Exposure Controls

Appropriate engineering controls: For closed cycles use dedusting extraction equipment; For semi-closed and open cycles ensure adequate ventilation and dust damping/wetting procedures.

8.3 Personal protective equipment (PPE)

Eye/face protection: Safety goggles/face shield if potential for contact is existing;

Skin (hand) protection: Gloves if potential for contact is given; further measures for body protection are usually not necessary;

Respiratory protection: No special protective equipment required. If dust occurs constantly.

Section 9: Physical and chemical properties

9.1 Information on Basic Physical and Chemical Properties

Physical:

PARAMETER	VALUE/COMMENT	UNIT	METHOD
Form	Fine grained powder	-	Visual
Colour	Greyish black to brown	-	Visual
Odour	No	-	-
Density	2.3 (2.0 - 2.6)	g/cm3	EN1097-6
Bulk Density	1.0 (0.8 - 1.2)	g/cm3	EN1097-3

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Chemical:

PARAMETER	VALUE/COMMENT	UNIT	METHOD
pH	<12,5	-	(1:10; 20°C)
Water Solubility (20°C)	1 (0.7 – 1.4)	g/l	-

Note: All other parameters as given in Annex 2 of REACH-regulation are evaluated as not applicable.

Section 10: Stability and reactivity

10.1 Reactivity

No reactivity hazards.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of Hazardous Reactions

Not applicable as material is not hazardous and no reactivity hazards are to be expected.

10.4 Conditions to Avoid

No special requirements.

10.5 Incompatible Materials

No incompatible materials known.

10.6 Hazardous Decomposition Products

Not applicable as no hazardous properties.

Section 11: Toxicological Information

11.1 Potential Health Effects

The substance is not classified as hazardous.

11.2 Acute Toxicity (Oral, Inhalation, Dermal)

No acute toxicity.

11.3 Irritation (Skin, Eye Irritation)

Not irritating.

11.4 Corrosivity

Not corrosive.

11.5 Sensitisation

Not sensitising.

11.6 Repeated Dose Toxicity

No repeated toxicity.

11.7 Mutagenicity

Not mutagen.

11.8 Carcinogenicity

No carcinogenetic effects are known.

11.9 Toxicity to Reproduction

No reproduction toxicity.

For more detailed information to toxicological aspects Chemical Safety Report (CSR).

Section 12: Ecological Information

12.1 Toxicity

The substance is not classified as hazardous;
No aquatic toxicity;
No toxicity in sewage treatment plants.

12.2 Persistence and Degradability

Not applicable: inorganic substance;
Neither photo- or chemical degradation, nor biodegradation is expected.

12.3 Bioaccumulative Potential

Not applicable: inorganic substance;
Significant bioaccumulation is not expected.

12.4 Mobility in Soil

Moderately mobile in soil;
Adsorption to soil particles is possible;
Leaching of main compounds (SiO_2, Al_2O_3) is not expected.

12.5 Results of PBT and VPVB Assessment

No PBT and vPvB properties.

12.6 Other Adverse Effects

No other adverse effects are known;
Due to the CLP system the substance has not to be labelled as dangerous for the environment;
On the basis of existing data about the elimination, degradation and bioaccumulation potential longer term damage to the environment is unlikely.

For more detailed information to toxicological aspects Chemical Safety Report (CSR).

Section 13: Disposal Considerations

13.1 Waste Treatment Methods

Ashes (residues), coal have to be disposed of by national regulations for non-hazardous wastes; no further special treatment methods are necessary.

Waste codes/waste designation according to EWC:
10 Wastes from thermal processes
10 01 Wastes from power stations and other combustion plants (except 19)
10 01 02 Coal fly ash
10 01 17 Fly ash from co-incineration other than those mentioned in 10 01 16

Section 14: Transport Information

Not a dangerous good according to the regulations ADR, IMDG and IATA.

Section 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Ashes (residues), coal do not require any labelling.

15.2 Chemical Safety Assessment

Ashes (residues), coal do not require any labelling.

15.3 Water Pollution Class

Not hazardous (Annex 3), but refer to Environment Agency for latest position.

Section 15: Other Information

The Information in this safety information sheet describes the safety requirements of the product and is based on the present knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

This product(s) is supplied by Cemex UK on the understanding it will be used in the manner and for the purpose(s) specified in the Cemex UK datasheet(s), the user having taken all precautions stipulated. If you have purchased the product for supply to a third party for use at work, it is your duty to take all necessary steps to ensure that any person handling or using the product is provided with the information on this sheet.

If you are an employer, it is your duty to inform your employees and others who may be affected of any hazards described in this sheet and any precautions that should be taken. In circumstances where products are to be used outside the jurisdiction of the United Kingdom such usage must be in conformity with national standards or those described on this sheet, whichever are more stringent.

In general usage the term ‘fly ash’ is used for pulverized coal ash but it can also cover ash from burning other materials. Such ‘fly ash’ may have significantly differing properties and might not offer the same advantages as ash from burning pulverized coal. This Cemex UK datasheet only refer to PFA/ Fly ash produced from the burning of predominantly coal in power stations.

Information provided in this document is intended for those who will evaluate its significance and take responsibility for its use and application.

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