

Technical Datasheet 9.1

REACH– Generic Substance

Information Sheet (SIS) for PFA/Fly Ash (including Cenospheres)

Note: Ashes registered under “JS_Ashes (residues), coal” do not possess hazardous properties and therefore **NO** Safety Data Sheet (SDS) is required. To avoid confusion no SDS is available. The information given by this Substance Information Sheet (SIS) follows the structure and content Annex 2 of REACH-regulation (EC No 1907/2006 and amendment 453/2010) regarding the preparation of a SDS. Special Information e.g. PNECs (predicted no-effect level) and DNELs (derived no-effect level) left out in the SIS is available in the Chemical Safety Report (CSR).

It is the responsibility of the ash supplier to supply the user with information where required by the COSHH and REACH regulations. The UK Quality Ash Association is not a producer of PFA and FBA, but a trade association representing the interests of the UK coal fired power station operators. This SIS represents the agreed generic information available at the time of publication.

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier:

EC nr 931-322-8	Ashes (residues), coal
REACH registration nr	<i>Specific to the supplier of the Fly Ash/PFA</i>
Synonyms	Fly Ash or Pulverized Fuel Ash (PFA)
Trade names	<i>Specific to the supplier of the Fly Ash/PFA</i>

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 as detailed in UKQAA Technical datasheets)
Use advised against:	Not appropriate

1.3 Details of the supplier of the safety data sheet

[Supplier (manufacturer/importer/downstream user/distributor)]

[For producers: Information according to info given in registration.]

Producer/supplier:
Street/P.O. Box:
Nat. code/postcode,
place:
Phone:

Fax:

[Info: name of representative of registrant/responsible person for SIS in company!]

Responsible Person	Phone:
	Fax
	Email

1.4 Emergency telephone number

(Office hours):	Emergency number:
	Tel:
	Mobil:

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2. HAZARDS IDENTIFICATION

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

3. COMPOSITION/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 Mixtures

- not applicable

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 appropriate

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

- none

5.3 Advice for fire fighters

- not appropriate

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6. ACCIDENTAL RELEASE 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

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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 | [Appropriate ash control installations] |
| - for semi-closed and open cycles | [Appropriate ash control installations] |

- individual protection measures

- | | |
|---------------------------|--|
| - 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 – use respiratory dust mask |

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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/cm ³	EN 1097-6
bulk density	1.0 (0.8 – 1.2)	g/cm ³	EN 1097-3

- Chemical

Parameter	value/comment	unit	method
pH	< 12,5	-	(1:10; 20°C)
Water solubility (20°C)	1 (0.7 – 1.4)	g/l	

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

9.2 Other information

- not applicable

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

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)

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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 ₂ O 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 see Chemical Safety Report (CSR)

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

14. TRANSPORT INFORMATION

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

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.

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16. OTHER INFORMATION

The Information in this safety data 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 the UKQAA on the understanding it will be used in the manner and for the purpose(s) specified in the UKQAA 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.

Note: Section headings conform to REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency. Annex II.

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. UKQAA datasheets only refer to PFA (including cenospheres) / fly ash / FBA produced from the burning of predominantly coal in power stations.

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