

Safety Data Sheet



according to 29 CFR 1910.1200(g)

Flyash, JIS Z8901 Class 5

Revision date: 10.05.2016

Page 1 of 7

1. Identification

Product identifier

Flyash, JIS Z8901 Class 5

Details of the supplier of the safety data sheet

Company name: Powder Technology Inc.
Street: 1300 Grey Fox Road
Place: USA-55112 Arden Hills, MN
Telephone: +1 952 894 -8737
e-mail: sales@powdertechologyinc.com
Internet: http://www.powdertechologyinc.com

Emergency phone number: +1 952 894 -8737

Further Information

This safety data sheet was created by: ECI EnviroConsult Ingenieurbüro Dr. Lux e.K.

2. Hazard(s) identification

Classification of the chemical

Hazard categories:
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Hazard Statements:
Causes skin irritation
Causes serious eye irritation

Label elements

Signal word: Warning
Pictograms: exclamation mark



Hazard statements

Causes skin irritation
Causes serious eye irritation

Precautionary statements

Wash hands and face thoroughly after handling .
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water.
Specific treatment (see advice on this label).
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse .
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Hazards not otherwise classified

No information available.

3. Composition/information on ingredients

Mixtures

Safety Data Sheet



according to 29 CFR 1910.1200(g)

Flyash, JIS Z8901 Class 5

Revision date: 10.05.2016

Page 2 of 7

Hazardous components

CAS No	Components	Quantity
60676-86-0	silicon dioxide (amorphous)	40-60 %
1344-28-1	aluminium oxide	15-30 %
12137-20-1	titanium (II) oxide	1-3 %
1310-58-3	caustic potash, potassium hydroxide	1-3 %
1305-78-8	calcium oxide (mineral)	1-3 %
7446-11-9	sulfur trioxide	0-1 %

4. First-aid measures

Description of first aid measures

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with: Water and soap. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink plenty of water. When in doubt or if symptoms are observed, get medical advice.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Specific hazards arising from the chemical

Non-flammable.

Special protective equipment and precautions for fire-fighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid generation of dust. Do not breathe dust.

Environmental precautions

Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

Reference to other sections

Safe handling: see section 7

Safety Data Sheet



according to 29 CFR 1910.1200(g)

Flyash, JIS Z8901 Class 5

Revision date: 10.05.2016

Page 3 of 7

Personal protection equipment: see section 8
Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Work in well-ventilated zones or use proper respiratory protection.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Advice on storage compatibility

No special measures are necessary.

8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No.	Substance	ppm	mg/m ³	f/cc	Category	Origin
1305-78-8	Calcium oxide	-	5		TWA (8 h)	PEL
		-	2		TWA (8 h)	REL
1309-37-1	Iron oxide dust and fume (as Fe)	-	5		TWA (8 h)	REL
1309-37-1	Iron oxide fume	-	10		TWA (8 h)	PEL
1310-58-3	Potassium hydroxide	-	-		TWA (8 h)	TLV
		-	2		Peak	TLV
60676-86-0	Silica, fused, respirable dust	(Z-3)	(Z-3)		TWA (8 h)	PEL
1344-28-1	alpha-Alumina Respirable fraction	-	5		TWA (8 h)	PEL

Exposure controls

Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eye/face protection

Wear eye/face protection. Suitable eye protection: Tightly sealed safety glasses. Dust protection goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Suitable respiratory protective equipment: particulates filter device (DIN EN 143).

Safety Data Sheet



according to 29 CFR 1910.1200(g)

Flyash, JIS Z8901 Class 5

Revision date: 10.05.2016

Page 4 of 7

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: solid
Color: dark grey - brown
Odor: odourless

Test method

pH-Value: not determined

Changes in the physical state

Melting point/freezing point: not determined
Initial boiling point and boiling range: 1000 °C
Flash point: not applicable

Flammability

Solid: not determined
Gas: not applicable
Lower explosion limits: not applicable
Upper explosion limits: not applicable

Auto-ignition temperature

Solid: not determined
Gas: not applicable
Decomposition temperature: not determined

Oxidizing properties

Not oxidizing.

Density: 2,9 g/cm³
Water solubility: insoluble

Solubility in other solvents

not determined

Partition coefficient: not determined
Vapour density: not determined
Evaporation rate: not determined

Other information

Solid content: 100,00 %

10. Stability and reactivity

Reactivity

No hazardous reaction when handled and stored according to provisions.

Chemical stability

Stability: Stable

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

Hazardous reactions: May occur

After contact with water: Exothermal decomposition with formation of: Acid.

Safety Data Sheet



according to 29 CFR 1910.1200(g)

Flyash, JIS Z8901 Class 5

Revision date: 10.05.2016

Page 5 of 7

Conditions to avoid

none

Incompatible materials

Acid. Aluminium.

Hazardous decomposition products

No known hazardous decomposition products.

11. Toxicological information

Information on toxicological effects

Route(s) of Entry

inhalation, skin contact

Acute toxicity

CAS No	Components				
	Exposure route	Method	Dose	Species	Source
1310-58-3	caustic potash, potassium hydroxide				
	oral	LD50	273 mg/kg	Rat	RTECS
7446-11-9	sulfur trioxide				
	inhalative vapour	ATE	0,5 mg/l		
	inhalative aerosol	ATE	0,05 mg/l		

12. Ecological information

Ecotoxicity

The product is not: Ecotoxic.

Persistence and degradability

The product has not been tested.

Bioaccumulative potential

The product has not been tested.

Mobility in soil

The product has not been tested.

Other adverse effects

No information available.

Further information

None

13. Disposal considerations

Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

14. Transport information

US DOT 49 CFR 172.101

Proper shipping name:

Not a hazardous material with respect to these transport regulations.

Safety Data Sheet



according to 29 CFR 1910.1200(g)

Flyash, JIS Z8901 Class 5

Revision date: 10.05.2016

Page 6 of 7

Marine transport (IMDG)

UN number: No dangerous good in sense of this transport regulation.
UN proper shipping name: No dangerous good in sense of this transport regulation.
Transport hazard class(es): No dangerous good in sense of this transport regulation.
Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO)

UN number: No dangerous good in sense of this transport regulation.
UN proper shipping name: No dangerous good in sense of this transport regulation.
Transport hazard class(es): No dangerous good in sense of this transport regulation.
Packing group: No dangerous good in sense of this transport regulation.

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

Special precautions for user

No information available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

15. Regulatory information

U.S. Regulations

National Inventory TSCA

All hazardous components are listed in the TSCA.

National regulatory information

SARA Section 304 CERCLA:

Potassium hydroxide (1310-58-3): Reportable quantity = 1,000 (454) lbs. (kg)

SARA Section 311/312 Hazards:

Potassium hydroxide (1310-58-3): Immediate (acute) health hazard

sulfur trioxide (7446-11-9): Immediate (acute) health hazard

SARA Section 313 Toxic release inventory:

Aluminum oxide (fibrous forms) (1344-28-1): De minimis limit = 1.0 %, Reportable threshold = Standard

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information

Hazardous Materials Information Label (HMIS)

Health: 1
Flammability: 0
Physical Hazard: 0

NFPA Hazard Ratings

Health: 1
Flammability: 0
Reactivity: 1
Unique Hazard: -w



Safety Data Sheet



according to 29 CFR 1910.1200(g)

Flyash, JIS Z8901 Class 5

Revision date: 10.05.2016

Page 7 of 7

Revision date: 10.05.2016

Revision No: 1,00

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Other data

The above information describes exclusively the safety requirements of the product and is based on our present-day 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.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)