Fly Ash Products Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012. Date of issue: 08/14/2014 Revision date: 08/14/2014 Version: 1.0

SECTION 1: Identification of the subs	tance	/mixture and of the company/	undertaking		
1.1. Product identifier					
Product form : Mixture					
Product name	: Class	C Fly Ash			
	Post	Fast-Set			
1.2. Relevant identified uses of the substa	ance or	mixture and uses advised against			
Use of the substance/mixture	: Cons	truction materials.			
1.3. Details of the supplier of the safety da	ata she	et			
Precision Packaging Inc. or Materials Packaging C 10809 Executive Center, Suite 321 Little Rock, AR 72211 T 501-224-3882					
1.4. Emergency telephone number					
Emergency number	: CHEI	MTREC (800) 424-9300			
SECTION 2: Hazards identification					
2.1. Classification of the substance or mix	kture				
GHS-US classification					
Acute toxicity 4 (Oral) Carcinogenicity 1A Specific Target Organ Toxicity After Repeated Exp	osuro 1				
2.2. Label elements	Josule I				
GHS-US labelling Hazard pictograms (GHS-US)		A A			
		GHS07 GHS08			
Signal word (GHS-US)	: Dang	er			
Hazard statements (GHS-US)		ful if swallowed. May cause cancer. Ca	uses damage to	lungs through prolonged or	
Prevention statements (GHS-US)	<ul> <li>repeated exposure.</li> <li>Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves and clothing as well as eye and face protection. Do not breathe dust. Use the proper respirator, when necessary, to avoid injury.</li> </ul>				
Response statements (GHS-US)	medio	allowed, immediately call a poison center cal attention.	er/doctor. Rinse n	nouth. If exposed or concerned, get	
Storage statements (GHS-US)		locked up.	anaa with all loop	l state and federal regulations	
Disposal statements (GHS-US) Supplemental Information		ose of contents and container in accord			
upplemental Information       Read and Follow all precautions listed in the Safety Data Sheet available on request or at         Ashgrovepkg.com. Additional information on the selection and use of respirators can be found in       the NIOSH Respirator Selection Logic (DHHS [NIOSH] Publication No. 2005-100) and the         NIOSH Guide to Industrial Respiratory Protection (DHHS [NIOSH] Publication No. 87-116)       available at <a href="http://www.cdc.gov/niosh/docs/87-116/">http://www.cdc.gov/niosh/docs/87-116/</a> .         This product contains greater than 0.1% crystalline silica. Crystalline silica has been linked to					
		er, silicosis, and other lung problems in			
2.3. Other hazards					
Other hazards not contributing to the classification	: Not a	pplicable.			
3.1. Substance					
Not applicable.					
3.2. Mixture					
Name		Product identifier	%	GHS-US classification	
Quartz		(CAS No) 14808-60-7	≤ 10	Acute Tox. 4 (Oral), H302 Carc. 1A, H350 STOT RE 1, H372	
Ashes (residues)		(CAS No) 68131-74-8	90 - 100	Not Controlled	

Ashes (residues)

(CAS No) 68131-74-8

90 - 100

Not Controlled.

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation	<ul> <li>If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.</li> </ul>
First-aid measures after skin contact	<ul> <li>If irriation occurs, flush skin with plenty of water. Remove contaminated clothing and shoes.</li> <li>Wash clothing before reuse. Call a physician if irritation develops and persists.</li> </ul>
First-aid measures after eye contact	: In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. irritation persists, get medical attention.
First-aid measures after ingestion	: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if distress develops.
4.2. Most important symptoms and e	ffects, both acute and delayed
Symptoms/injuries after inhalation	: May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include skin abrasion and redness.
Symptoms/injuries after eye contact	May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion	: Harmful if swallowed. May cause stomach distress, nausea or vomiting.
4.3. Indication of any immediate med	ical attention and special treatment needed
No additional information available.	
SECTION 5: Firefighting measure	s
5.1. Extinguishing media	
Suitable extinguishing media	: Treat for surrounding material.
5.2. Special hazards arising from the	, , , , , , , , , , , , , , , , , , ,
5.2. Special hazards arising from the	: None.
	. Note.
5.3. Advice for firefighters	. Know unused of fine Microsfull fire fighting turn out even (full Dupling soon) and reariseters.
Protection during firefighting	: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).
SECTION 6: Accidental release m	easures
6.1. Personal precautions, protective	equipment and emergency procedures
General measures	: Use personal protection recommended in Section 8. Clean up quickly and avoid generating dus Wear suitable respiratory protection if dusty conditions arise. Avoid contact with eyes.
6.2. Methods and material for contain	nment and cleaning up
For containment	: Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	: Vacuum or sweep material and place in a disposal container. Provide ventilation.
6.3. Reference to other sections	
See section 8 for further information on prote	ctive clothing and equipment and section 13 for advice on waste disposal.
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Avoid contact with eyes. Do not swallow. Avoid generating and breathing dust. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. When using do not eat, drink or smoke.
Hygiene measures	: Launder clothing before reuse. Wash hands before eating, drinking, or smoking.
7.2. Conditions for safe storage, incl	uding any incompatibilities
Storage conditions	: No special storage requirements are needed.
7.3. Specific end use(s)	
No additional information available.	
SECTION & Experience controls/n	reene protoction

SECTION 8: Exposure controls/personal protection					
8.1. Control parameters					
Quartz (14808-60-7)					
USA ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m <sup>3</sup> (respirable fraction)			
USA OSHA	OSHA PEL (TWA) (mg/m³)	(30)/(%SiO2 + 2) mg/m <sup>3</sup> TWA, (total dust) (250)/(%SiO2 + 5) mppcf TWA, (respirable fraction) (10)/(%SiO2 + 2) mg/m <sup>3</sup> TWA, (respirable fraction)			

8.2.	Exposure controls	
Approp	riate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Hand p	rotection	: Wear standard work gloves (leather, cotton, coated cotton, etc.) as needed to prevent abrasion.
Eye pro	tection	: Safety glasses or goggles are recommended when using product.
Skin an	d body protection	: Wear suitable clothing common to do-it-yourself projects.
Respira	tory protection	: A NIOSH approved respirator is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Enviror	mental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other ir	nformation	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties					
9.1. Information on basic physical and	chemical properties				
Physical state	: Dry powder mix.				
Appearance	: Fine to coarse granul.				
Colour	: Gray.				
Odour	: None.				
Odour threshold	: Not applicable.				
рН	: No data available.				
Relative evaporation rate (butylacetate=1)	: No data available.				
Melting point	: No data available.				
Freezing point	: No data available.				
Boiling point	: Not applicable.				
Flash point	: Not applicable.				
Self ignition temperature	: No data available.				
Decomposition temperature	: No data available.				
Flammability (solid, gas)	: Not flammable.				
Vapour pressure	: No data available.				
Relative vapour density at 20 °C	: No data available.				
Relative density	: Not applicable.				
Solubility	: No data available.				
Log Pow	: No data available.				
Log Kow	: No data available.				
Viscosity, kinematic	: Not applicable.				
Viscosity, dynamic	: Not applicable.				
Explosive properties	: No data available.				
Oxidising properties	: No data available.				
Explosive limits	: No data available.				
9.2. Other information					
VOC content	: 0				
SECTION 10: Stability and reactivity	/				

10.1.	Reactivity					
No dange	No dangerous reaction known under conditions of normal use.					
10.2.	Chemical stability					
Stable ur	der normal conditions.					
10.3.	Possibility of hazardous reactions					
No dange	erous reaction known under conditions of normal use.					
10.4.	Conditions to avoid					
Incompat	ible materials.					
10.5.	Incompatible materials					
None kno						
10.6.	Hazardous decomposition products					
None kno	wn.					

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.				
<b>SECTION 11: Toxicological information</b>	on			
11.1. Information on toxicological effects				
Acute toxicity	: Harmful if swallowed.			
Questa (14909 60 7)				
Quartz (14808-60-7)	500 mg/kg			
	500 mg/kg			
Ashes (residues) (68131-74-8)	> 2000 mg/kg			
LD50 oral rat	>2000 mg/kg			
Fly Ash Products				
ATE (oral)	1538 mg/kg, rat			
ATE (dermal)	No data available.			
ATE (inhalation)	No data available.			
Skin corrosion/irritation	: Based on available data, the classification criteria are not met.			
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.			
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.			
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.			
Carcinogenicity	: May cause cancer.			
Quartz (14808-60-7)				
IARC group	1			
National Toxicology Program (NTP) Status	2			
Reproductive toxicity	: Based on available data, the classification criteria are not met.			
Specific target organ toxicity (single exposure)	Based on available data, the classification criteria are not met.			
Specific target organ toxicity (repeated exposure)	: Causes damage to lungs through prolonged or repeated exposure. (Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.)			
Aspiration hazard	: Based on available data, the classification criteria are not met.			
Symptoms/injuries after inhalation	: May cause respiratory tract irritation.			
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include skin abrasion and redness.			
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.			
Symptoms/injuries after ingestion	: Harmful if swallowed. May cause stomach distress, nausea or vomiting.			
SECTION 12: Ecological information				
12.1. Toxicity				
Ecology - general	: Not considered to be harmful to aquatic life.			
12.2. Persistence and degradability				
Fly Ash Products				
Persistence and degradability	No data available.			
12.3. Bioaccumulative potential				
Fly Ash Products				

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Fly Ash Products				
Bioaccumulative potential	No data available.			
12.4. Mobility in soil				
Fly Ash Products				
Ecology - soil	No data available.			
12.5. Other adverse effects				
Other adverse effects :	No data available.			

<b>SECTION 13: Di</b>	osal considerations	
13.1. Waste trea	ent methods	
Waste disposal recor	endations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations.	

according to the Hazard	Commun	nication Standard (CFR29 191	0.1200) HazCom 2012.		
SECTION 14: T	ransp	ort information			
In accordance with					
14.1. UN numb	er				
Not applicable.					
14.2. UN prope	er shipp	ing name			
Not applicable.					
14.3. Additional i	informa	tion			
Other information		: N	o supplementary information avail	able.	
15.1. US Federal re	gulatio	ns			
Quartz (14808-60	-7)				
	-	s TSCA (Toxic Substances	s Control Act) inventory		
Ashes (residues)	(68131	-74-8)			
	-	s TSCA (Toxic Substances	s Control Act) inventory		
15.3. US State regu	ulations	i			
Fly Ash Products					
State or local regula	ations			ne Silica, Quartz and may also co State of California to cause cance	
Quartz (14808-60-7	7)				
U.S California - Proposition 65 - Carcinogens List		California - Proposition evelopmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes.	No.		No.	No.	No.
SOURCE AGENCY	CARCI	NOGEN CLASSIFICATIO	NS:		
IARC (I)		International Agency for	or Research on Cancer.		
<ol> <li>Carcinogenic to humans;</li> <li>Probably carcinogenic to humans;</li> <li>Possibly carcinogenic to humans;</li> <li>Not classifiable;</li> <li>Probably not carcinogenic to humans.</li> </ol>					
NTP (N)		National Toxicology Pr			
<ol> <li>Evidence of Carcinogenicity;</li> <li>Known Human Carcinogens;</li> <li>Reasonably anticipated to be Human Carcinogen;</li> <li>Substances delisted from report on Carcinogens;</li> <li>Twelfth Report - Items under consideration.</li> </ol>					
SECTION 16: C	)ther <u>i</u> l	nformatio <u>n</u>			
Data sources					CFR29 1910.1200) HazCom
NFPA health hazard       : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.				0	
NFPA fire hazard			0 - Materials that will not burn.		

NFPA fire hazard NFPA reactivity

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

0 - Normally stable, even under fire exposure

conditions, and are not reactive with water.

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