

SAFETY DATA SHEET

ALUMINIUM PHOSPHIDE

SECTION 1: Identification of the substance/mixture and of the company/undertaking Trade name:

1.1 Product identifier:	
CAS Number:	20859-73-8
EC number:	244-088-0
1.2 SYNONYMS:	<ul style="list-style-type: none">• AIP• Phosphide of aluminium

SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:	Classification according to Regulation (EC) No 1272/2008 The substance is classified according to the CLP regulation.
2.2 Label elements:	Labelling according to Regulation (EC) No 1272/2008 Acute toxicity, Oral (Category 2) Acute toxicity, Dermal (Category 3) Acute toxicity, Inhalation (Category 1) Short term (acute) aquatic hazard (Category 1) Specific target organ toxicity, single exposure, respiratory system (Category 1)
Hazard Pictograms:	
Signal Word:	Danger
Hazard statements:	H300: Fatal if swallowed H310: Fatal in contact with skin H330: Fatal if inhaled H400: Very toxic to aquatic life
Precautionary Statements:	P280: Wear protective gloves/protective clothing/eye protection/face protection. P273: Avoid release to the environment. P303+P361+P353: IF ON SKIN (or hair): Remove/take off immediately

	<p>all contaminated clothing. Rinse skin with water/shower.</p> <p>P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.</p> <p>P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.</p> <p>P404: Store in a closed container.</p> <p>P501: Dispose of contents/container to an approved waste disposal plant.</p>
2.3 Other hazards:	
Inhalation:	Inhaling dust or the phosphine gas it releases can cause severe respiratory distress, nausea, dizziness, and may be fatal.
Ingestion:	Ingestion is extremely dangerous because it reacts in the body to release toxic phosphine gas, causing severe poisoning and potentially death.
Skin Contact:	can cause irritation or burns, and prolonged contact may allow absorption of toxic phosphine gas, posing serious health risks.
Eye contact:	can cause severe irritation, redness, and pain, and exposure to the phosphine gas it releases may damage eye tissues.
Chronic Exposure:	Repeated or long-term exposure or low levels of phosphine gas may cause persistent respiratory problems, fatigue, and damage to major organs such as the heart and lungs.
Aggravation of pre-existing conditions:	Exposure can worsen existing respiratory, cardiovascular, or liver conditions, increasing the risk of severe health complications.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation:	Substances
CAS No:	Description: 20859-73-8 ALUMINIUM PHOSPHIDE
Identification number(s):	EC number: 244-088-0

SECTION 4: First aid measures

4.1 Description of first aid measures	
General information:	
After inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
After skin contact:	Remove contaminated clothing. Wash with soap and water. Consult a physician.
After eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. consult a physician.
After swallowing:	Rinse mouth with water. Immediately after ingestion. Never give anything by mouth to an unconscious person. Do not induce vomiting. Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed:	Exposure may cause acute nausea, vomiting, breathing difficulty, chest pain, and dizziness, with delayed effects including severe damage to the heart, lungs, and other organs that can be life-threatening.
4.3 Indication of any immediate medical attention and special treatment needed:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media:	Carbon dioxide dry powder, Alcohol-resistant foam. Do not use water.
5.2 Special hazards arising from the substance or mixture:	Phosphine gas.
5.3 Advice for firefighters:	Wear fully protective suit, safety glasses and respiratory device. Cool tanks/drums with water spray/remove them into safety.
5.4 further information:	no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Avoid dust accumulation. Seek medical attention.
6.2 Environmental precautions:	Do not enter this chemical into drains.
6.3 Methods and material for containment and cleaning up:	Take up spill into absorbent material, e.g.: sand, earth, vermiculite, powdered limestone. Scoop absorbed substance into closing containers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:	For use in are with adequate ventilation. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material
---	---

	Do not use in confined spaces. Electrostatic discharge protection. Minimize dust generation and accumulation. Avoid ingestion and inhalation.
7.2 Conditions for safe storage, including any incompatibilities:	Store in original containers. Keep containers securely sealed Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Store in a dry and dark area. Store under dry area in a well ventilated place. Keep away from moisture, water. Tightly closed.
Requirements to be met by storerooms and receptacles:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end uses:	no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters	
Additional information about design of technical facilities:	A system of local and general exhaust is recommended.
8.2 Exposure controls	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment:	Dust respirator, protective masks, wearing anti chemical gloves, rubber gloves, etc.
General protective and hygienic measures:	Eyes, body and hand protection, maintain indoor air unobstructed. Wear protective equipment.
	Respiratory protection: Required.
Protection of hands:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without

	touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws. Wash and dry hands.
	Eye protection: Required
Protection of Body:	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties	
General Information	
Appearance: Form:	Solid, crystalline powder or pellets
Colour:	Grey to dark grey
Odour:	Garlic-like
pH-value:	Not applicable
Melting point/Melting range:	1100°C
Boiling point/Boiling range:	No data available
Flammability (solid, gaseous):	Non-Flammable
Ignition temperature:	38°C
Decomposition temperature:	Not determined
Self-igniting:	Not determined
Flash point:	No data available
Danger of explosion:	Not determined
Explosion limits: Lower:	Not determined
Explosion limits: Upper:	Not determined
Vapour pressure:	Not determined
Density at 20 °C:	1.56 g/cm ³
Relative density:	1.56
Vapour density:	Not applicable
Evaporation rate:	No data available
Solubility in / Miscibility with-water at 20 °C:	InSoluble
Partition coefficient:(n-octanol/water)	No data available
Viscosity:	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity	Reacts with water to release phosphine gas which is highly toxic and flammable.
10.2 Chemical stability	This chemical is stable under storage conditions.
10.3 Possibility of hazardous reactions	Contact with water or acids: release of phosphine gas
10.4 Conditions to avoid	Heat, direct sunlight, flames, sparks, moisture, Water.
10.5 Incompatible materials	Strong oxidizing agents, strong acids and bases, halogens, water.
10.6 Hazardous decomposition products	Phosphine gas.

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute Toxicity:	LD50 (Oral, Rat): no data available LD50 (Dermal, Rabbit): no data available LC50 (Inhalation Rat): no data available
Skin corrosion/Irritation:	Causes serious skin irritation
Serious eye damage/irritation:	Causes serious eye damage
Respiratory damage/irritation:	No data available
Ingestion:	Causes serious intestinal damage
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Specific target organ toxicity - single exposure:	May cause respiratory damage.
Specific target organ toxicity - repeated exposure:	No data available
Aspiration hazard:	No data available
Signs and Symptoms of Exposure:	Refer section 2.3
11.2 Additional toxicological information	
Biodegradability:	Not biodegradable

SECTION 12: Ecological information

12.1 Toxicity Aquatic toxicity:	LC50(fish): no data available EC50(daphnia): no data available EC50(algae): no data available
12.2 Persistence and degradability:	Not biodegradable
12.3 Bioaccumulative potential:	Low bioaccumulative
12.4 Mobility in soil:	No data available
12.5 Other adverse effects:	No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Uncleaned packaging Recommendation:	dispose of in accordance with local hazardous waste regulations
Recommended cleansing agents:	Sand. Do not use water, alcohols or solutions for spill cleanup

SECTION 14: Transport information

14.1 UN-Number · ADR, ADN, IMDG, IATA:	3048
14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:	ALUMINIUM PHOSPHIDE
14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA :	6.1
14.4 Packing group · ADR, IMDG, IATA:	1
14.5 Environmental hazards:	Yes
14.6 Special precautions for user:	Handle responsibly.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU	Directive 2012/18/EU, under that this substance is not classified in listed substance as acute toxic.
Named dangerous substances:	This substance is not listed in the annex 1 to the directive.
15.2 Chemical safety assessment:	Chemical assessment has not been carried out

Multichem Exports LLP.
1315, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 6301006301
E: sales@multichemexports.com
www.multichemexports.com



SECTION 16: Other information

The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

MULTI
CHEM
— EXPORTS —
YOUR CHEMICAL PARTNER