



SAFETY DATA SHEET

According to 29 CFR 1910.1200

ALUMINA HYDRATE

Date of issue: September 01, 2023 Revision date: - Version: 1

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

1.1 Product identifier

Product form Solid
Substance name Alumina hydrate
CAS No. 12522-88-2
Formula Al₂O₃
Synonyms Aluminum oxide

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

Use of the substance/mixture According to the product technical data sheet.

1.3 Details of the supplier of the safety data sheet

Química Pima, S.A. de C.V.
Del Cobre 20, Parque Industrial Hermosillo
Hermosillo, Sonora, México. C.P. 83297 Tel. 011 (662) 251-0010 / (662) 251-0316
ventas@qpima.com
www.qpima.com

1.4 Emergency telephone number

Emergency number CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

SECTION 2.- HAZARD IDENTIFICATION

2.1 GHS-US classification

Target Organ Systemic Toxicity – Repeated Exposure 2 H373

2.2 Label elements

GHS-US labelling
Hazard pictograms (GHS-US)



Signal Word (GHS-US):

Danger

Hazard statement (GHS-US):

H373 May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US):

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container following federal, state, and local regulations.

2.3 Other hazards

The material is not corrosive when dry; it is moderately corrosive when dissolved in water.

2.4 Unknown acute toxicity (GHS-US)

Not applicable

SECCIÓN 3.- COMPOSITION / INFORMATION OF INGREDIENTS

3.1 Substance

Name	Product identifier	%
Alumina hydrate	(CAS No.) 12522-88-2	> 65



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3.2 Mixture

Not applicable

SECCIÓN 4.- FIRST AID MEASURE

4.1 Description of first aid measure

First-aid measures general

Check vital signs. Unconscious: keep airways clear and provide breathing assistance. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform CPR. Conscious victim with breathing difficulty: semi-upright position. Victim in shock: lying on back with legs slightly elevated. Vomiting: prevent choking or aspiration. Avoid cooling by covering the victim (without heating). Continue monitoring the victim. Provide psychological support. Keep the victim calm, and avoid physical strain. Depending on the victim's condition: seek medical attention/hospital. Never give anything by mouth to an unconscious person. If feeling unwell, seek medical attention (if possible, show the label).

First-aid measures after eye contact

Rinse eyes immediately with plenty of water, occasionally lifting the upper and lower eyelids. Check if the victim is wearing contact lenses and remove them if present. Continue rinsing for at least 10 minutes. Consult a doctor after exposure or if feeling unwell.

First-aid measures after skin contact

Rinse contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue rinsing for at least 10 minutes. Consult a doctor after exposure or if feeling unwell. Wash clothing before reuse. Thoroughly clean shoes before reuse.

First-aid measures after inhalation

Move the victim to fresh air and keep them at rest in a comfortable position for breathing. If breathing has stopped, is irregular, or if respiratory arrest occurs, trained personnel should provide artificial respiration or oxygen. Mouth-to-mouth resuscitation can be dangerous for the person assisting. Consult a doctor after exposure or if feeling unwell. If unconscious, place in the recovery position and get medical attention immediately. Ensure good air circulation. Loosen anything that might be tight, such as a collar, tie, or belt.

First-aid measures after ingestion

Rinse the mouth with water. Remove dentures if possible. Move the victim to fresh air and keep them at rest in a comfortable position for breathing. If material has been ingested and the exposed person is conscious, give small amounts of water to drink. Stop giving water if the exposed person feels unwell, as vomiting can be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep the head low so that the vomit does not enter the lungs. Consult a doctor after exposure or if feeling unwell. Do not give anything by mouth to an unconscious person. If unconscious, place in the recovery position and get medical attention immediately. Ensure good air circulation. Loosen anything that might be tight, such as a collar, tie, or belt.

4.2 Most important

Symptoms/injuries after inhalation

Respiratory tract irritation, cough.

Symptoms/injuries after skin contact

Contact with the skin irritates, resulting in redness and pain. In case of severe exposure to this substance, burns may occur.

Symptoms/injuries after eye contact

Irritation, redness.

Symptoms/injuries after ingestión

No data available.

Chronic symptoms

No data available

4.3 Indications of any immediate medical attention and special treatment needed

Treat symptomatically. Contact a poison treatment specialist immediately if a large amount has been ingested or inhaled.



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SECCIÓN 5.- FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media No data available.

5.2 Special hazard arising from the substance or mixture

Fire hazard Not available.

Explosion hazard Not available.

Reactivity See section 10.

5.3 Advice for firefighters

Precautionary measures fire In case of fire, quickly isolate the area, evacuating all people from the vicinity of the incident.

Firefighting instructions Do not take any action that involves personal risk or without proper training.

Protection during firefighting Firefighters should wear appropriate protective equipment and a self-contained breathing apparatus (SCBA) with a full-face mask operating in positive pressure mode. Firefighter protective clothing (including helmets, gloves, and boots) provides a basic level of protection in the event of a chemical incident.

SECCIÓN 6.- ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment See section 8.

Emergency procedures Evacuate the surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through the spilled material. Wear suitable personal protective equipment. Secure the hazard area, do not allow any type of flame to ignite. Wash contaminated clothing. For large spills/confined spaces: consider evacuation. In case of hazardous reactions: stay upwind. In case of reactivity danger: consider evacuation. Avoid contact with eyes, skin, or clothing. Avoid inhaling dust, mist, vapor, or spray.

Measures in case of dust release Ventilate immediately, especially in low-lying areas where vapors may accumulate. Avoid inhalation of dust. Wear appropriate respiratory apparatus when ventilation is inadequate.

6.1.2 For emergency responders

Do not take any action that involves personal risk or without proper training. Evacuate the surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through the spilled material. Avoid inhalation of dust. Ensure adequate ventilation. Wear appropriate respiratory apparatus when ventilation is inadequate. Wear suitable personal protective equipment. If special clothing is required to handle the spill, refer to Section 8 for suitable and unsuitable materials.

6.2 Environmental precautions

Avoid dispersal of spilled material and prevent contact with soil, waterways, drains, and sewers. Notify the relevant authorities if the product has caused environmental contamination (sewers, waterways, soil, or air).

6.3 Methods and material for containment and cleaning up

Method for containment Contain and collect any contaminated material. Avoid runoff into sewers, waterways, or disposal in areas where surface or groundwater may be affected.

Method for cleaning up Remove containers from the spill area. Avoid generating dust. Do not sweep dry. Vacuum the dust with equipment that includes a HEPA filter and place it in a sealed, labeled waste container. Dispose of through a licensed waste disposal contractor.



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6.4 Reference to other sections

For further information refer to section 8: Exposure-controls/personal protection

SECTION 7.- HANDLING AND STORAGE

7.1 Precautions for safe handling

Precautions for safe handling

Use appropriate personal protective equipment (see section 8). Do not breathe dust. Do not ingest. Avoid contact with eyes, skin, and clothing. Keep in the original container or an approved alternative made of a compatible material, tightly sealed when not in use. Empty containers retain product residues and can be hazardous. Do not reuse the container. Eating, drinking, and smoking should be prohibited in areas where this product is handled, stored, or processed. Workers should wash their hands and face before eating, drinking, or smoking. Remove protective equipment and contaminated clothing before entering eating areas. Refer to section 8 for additional information on hygiene measures.

Hygiene measures

Handle following safety guidelines for chemical products. Wearing closed work clothing is an additional requirement as indicated in the personal protective equipment guidelines. Eating, drinking, or smoking while using this product is prohibited. Wash hands and/or face before breaks and at the end of work. Gloves should be inspected regularly and before use. Remove contaminated clothing immediately. Wash contaminated clothing before reuse. Store work clothing separately.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store following local regulations. Store in the original container protected from direct sunlight in a dry, cool, and well-ventilated area, away from incompatible materials (see section 10), food, and drink. Keep the container tightly closed and sealed until ready for use. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Incompatible products

May react or be incompatible with oxidizing materials. Reactive or incompatible with the following materials: acids and moisture. Slightly reactive or incompatible with the following materials: organic substances.

Heat-ignition

Not available

Storage area

Store in the original container protected from direct sunlight in a dry, cool, and well-ventilated area, away from incompatible materials (see section 10), food, and drink.

Special rules on packaging

Opened containers must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials

No data available

7.3 Specific end use(s)

No additional information is available

SECTION 8.- EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Alumina hydrate	Not available	Not available	Not available



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12522-88-2

8.2 Exposure controls

Appropriate engineering controls

Eyewash stations and safety showers must be available near the area of use/handling. Provide exhaust ventilation or other engineering controls to keep vapor or dust concentrations (total/respirable) below the applicable occupational exposure limits mentioned above. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling this product have explosion relief vents or an explosion suppression system or be designed for an oxygen-deficient environment. Ensure that dust handling systems (such as exhaust ducts, dust collectors, containers, and processing equipment) are designed to prevent the escape of dust into the work area (i.e., there are no leaks from the equipment).

Personal protective equipment

Protective gloves, approved eye protection, protective equipment for the body, appropriate footwear, and full-face particle respirator with dust cartridges.

Material for protective clothing

Not available.

Hand protection

Use protective gloves.

Eye protection

Approved eye protection equipment should be used when a risk assessment indicates it is necessary to avoid exposure to liquid splashes, mists, gases, or dust. If contact is possible, the following protection should be used unless the assessment indicates a higher degree of protection: safety glasses with side shields. If operational conditions cause the formation of high concentrations of dust, dust goggles should be used.

Skin and body protection

Before using this product, personal protective equipment for the body should be selected based on the task to be performed and the associated risks and must be approved by a specialist. Appropriate footwear and any other necessary skin protection measures should be chosen based on the task and the risks involved. Such measures must be approved by a specialist before handling this product.

Respiratory protection

When a risk assessment shows that air-purifying respirators are appropriate, use a full-face particle respirator with dust cartridges as a backup to engineering controls. If the respirator is the only means of protection, use a fully supplied air respirator. Use respirators and components tested and approved according to appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental exposure controls

Avoid release to the environment.

SECTION 9.- PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Solid
Appearance	Crystalline powder
Odor	Odorless
Color	White
Molecular mass	No data available
Odor threshold	No data available
pH	No data available
pH solution	No data available
Relative evaporation rate (butyl acetate = 1)	No data available



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Melting/Freezing point	2050 °C
Boiling point	2977 °C
Flash point	No data available
Self-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	0.13 kPa
Relative vapor density at 20 °C	No data available
Relative density	3.2 – 4 (20 °C)
Solubility	Insoluble in water
Log Pow	No data available
Log Kow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Explosive limits	No data available

9.2 Other information

No additional information is available

SECTION 10.- STABILITY AND REACTIVITY

10.1 Reactivity	No data available
10.2 Chemical stability	Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions	None under normal conditions of use.
10.4 Conditions to avoid	No data available
10.5 Incompatible materials	May react or be incompatible with oxidizing materials. Reactive or incompatible with the following materials: acids and moisture. Slightly reactive or incompatible with organic substances.
10.6 Hazardous decomposition products	Stable under recommended storage conditions.

SECTION 11.- TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Likely routes of exposure	Skin and eyes contact, inhalation, and ingestion.
Acute toxicity	No data available.
Skin corrosion/irritation	No data available.
Serious eye damage/irritation	Irritation, redness.
Respiratory or skin sensitization	Irritation, cough.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Specific target toxicity (single exposure)	No data available
Specific target toxicity (repeat exposure)	No data available



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No data available

Name	LD ₅₀ oral	LD ₅₀ dermal	LC ₅₀ inhalation
Alumina hydrate	No data available	No data available	No data available

SECTION 12.- ECOLOGICAL INFORMATION

12.1 Toxicity

Ecology – General

Classification concerning the environment: not applicable.

Ecology – Air

Not classified as dangerous for the ozone layer.

Ecology – Water

In general, for aluminum compounds with acidic reactions: biological effects: are toxic to aquatic organisms.

NOEC: *Dafnia* (> 100 mg/l, 48 h)

NOEC: fish (> 100 mg/l, 96 h)

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Other adverse effects

Other information

SECCIÓN 13.- INFORMACIÓN RELATIVA A LA ELIMINACIÓN DE LOS PRODUCTOS

13.1 Waste treatment methods

Waste treatment methods

Avoid or minimize waste generation whenever possible. Disposal of this product, its solutions, and any by-products must always comply with environmental protection and waste disposal legislation, as well as all local authority requirements. Dispose of leftovers and non-recyclable products through an authorized contractor for disposal. Waste should not be discharged untreated into sewers unless it complies with the requirements of all relevant authorities.

Waste disposal recommendations

Avoid or minimize waste generation whenever possible. Residual containers should be recycled. Incineration or burial should only be considered when recycling is not feasible. Dispose of product waste and containers with all possible precautions. Precautions should be taken when handling emptied containers that have not been cleaned or rinsed. Empty containers or liners may retain product residues. Avoid dispersing spilled material, and prevent contact with soil, waterways, drainage systems, and sewers.

SECTION 14.- TRANSPORT INFORMATION

14.1 UN Number

Unregulated

14.2 UN proper shipping name

Unregulated

14.3 Class of hazards in transportation

Unregulated



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14.4 Packaging group

Unregulated

14.3 Additional information

Other information

Transport within user premises: always transport in closed containers that are upright and secure. Ensure that personnel transporting the product are aware of what to do in case of an accident or spill.

Overland transport

No additional information is available.

Transport by sea

No additional information is available.

Air transport

No additional information is available.

SECTION 15.- REGULATORY INFORMATION

International inventories

TSCA All are listed

TSCA – Toxic Substances Control Act Inventory Section 8(b).

DSL/NDSL - Domestic Substance List/Non-Domestic Substance List.

US Federal Regulations: Not listed in the Toxic Substances Control Act Inventory

SARA 311/312 Categories.

Acute Health Hazard No Chronic Health Hazard No Fire Hazard No

Sudden Hazardous Pressure Release No Reactive Hazard No

Clean Water Act. None of these chemicals are listed under the Clean Water Act.

CERCLA. None of the ingredients are listed.

Official Mexican Standard NOM-002-SCT/2011, List of the most commonly transported hazardous substances and materials.

SECTION 16.- OTHER INFORMATION

NFPA	NFPA health Hazard	2	NFPA fire Hazard	0	NFPA instability Hazard	0	NFPA Special hazard	-
HMIS III	Health	2	Flammability	0	Physical	0	Personal protection	E

Safety glasses, gloves, and dust respirator

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Made for: Química Pima, S.A. de C.V. Del Cobre No. 20 Parque Industrial. Hermosillo, Sonora, México. 83297.

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Revision note: -

IMPORTANT NOTE: Information in this SDS is from available published sources and is believed to be accurate, but is not exhaustive and will be used only as a guide, which is based on current knowledge of the chemical substance or mixture and applied to the appropriate product for safety precautions. No warranty, express or implied, is made and Pima Chemicals & Fertilizers, LLC and Quimica Pima, S.A. de C.V. assumes no liability resulting from the use of this SDS. The user must determine the suitability of this information for his application.

End of Safety Data Sheet