

Section 1: Chemical Product and Company Identification

Product Name: Activated Alumina

Product Number: P400016; M001-210; M001-213; M001-214

Recommended Use: Desiccant

Restrictions on Use: Not Applicable.

Details of the supplier:

Company: Ivys Adsorption Inc

Address: 730 boul Industriel Blainville J7C 3V4 Quebec Canada

Phone: 14509798700

Section 2: Hazards Identification

Classification of the substances or mixture:

Classification according to regulation (EC) 1272/2008: Not a hazardous substance or mixture

Label Elements

Labeling according to Regulation (EC) No 1272/2008: Not a hazardous substance or mixture

Other hazards which do not result in classification:

None

Section 3: Composition/Information on Ingredients

Sr. No.	Ingredient	CAS No.	Concentration
1	Activated Alumina	1344-28-1	>99.5%

Section 4: First-Aid Measures

Description of first aid measures:

General advice: Move out of dangerous area.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact: Wash off with soap and plenty of water.

In case of eye contact: Flush eyes with water as a precaution.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Most important symptoms and effects: Treat according to symptom, there is not known specific medicine.

Section 5: Fire-Fighting Measures

Extinguisher media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture: Aluminum oxide

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Further information: No data available

Section 6: Accidental Release Measures

For guidance on selection of personal protective equipment see chapter 8 of this material safety data sheet. See Chapter 13 for information on disposal observes the relevant local and international regulations.

Personal precautions, protective equipment and emergency procedures: Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental precautions: No special environmental precautions required

Methods for containment and cleaning up: Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections:
Section 13 for information on disposal.

Section 7: Handling and Storage

Precautions for safe handling:

Advice on protection against fire and explosion: Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures: General industrial hygiene practice. For precautions see section 2.2.

Conditions for safe storage, including incompatibilities: Keep container tightly closed in a dry and well-ventilated place.

Storage Class: Storage class (TRGS 510): 13: Non Combustible Solids

Specific end uses: Use only as directed.

Section 8: Exposure Controls and Personal Protection

Control parameters

Ingredients with workplace control parameters

Components	CAS-No.	Value	Control Parameters	Basis
Activated Aluminum	1334-28-1	TWA	10 mg/m ³	Canada. Alberta, Occupational Health

				and Safety Code (table 2: OEL)
		TWAEV	10 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	1 mg/m ³	Canada. British Columbia OEL
		TWA	1 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)

Exposure Controls

Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice

Individual protection measures, such as personal protective equipment

Eye/Face Protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection: 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 and good laboratory practices. Wash and dry hands.

Body Protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: No special environmental precautions required.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance (form): solid

Color: white

Odor: odourless

Odor threshold: Not Available.

PH (concentration): Not Available.

Melting point/range (°C): Not Available.

Boiling point/range (°C): Not available

Flash point (°C): Not applicable

Evaporation rate: Not Available.

Flammability (solid, gas): The product is not flammable

Ignition temperature (°C): Not Available.

Upper/lower flammability/explosive limits: Not Available.

Vapor pressure (20 °C): Not Available.

Vapor density: Not Available.

Relative density (25 °C): Not Available.

Water solubility (g/L) at 20 °C: insoluble

N-Octanol/Water partition coefficient: Not Available.

Auto-ignition temperature: Not Available.

Decomposition temperature: Not Available.

Viscosity, dynamic (MPa s): Not Available.

Explosive properties: Not explosive

Oxidation-reduction potential: The substance or mixture is not classified as oxidizing

Other Safety Information: No data available

Section 10: Stability and Reactivity

Reactivity: No data available

Chemical stability: Stable under recommended conditions of storage.

Possibility of hazardous reactions: No data available

Conditions to avoid: Dust generation, excess heat, exposure to moist air or water

Incompatible materials: Strong acids, Strong bases, Chlorine trifluoride, Ethylene oxide, Halogenated hydrocarbon, Oxygen difluoride, Sodium nitrate, Vinyl compounds, Oxygen, Nitrates, Halogens

Hazardous decomposition products: In the event of fire: see section 5

Section 11: Toxicological Information

Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male and female - > 10,000 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 2.3 mg/l - aerosol

(OECD Test Guideline 403)

Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 24 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation
(OECD Test Guideline 405)

Respiratory or skin sensitization

Draize Test - Guinea pig

Result: Does not cause skin sensitization.

- Mouse

Result: Does not cause respiratory sensitization.

Germ cell mutagenicity

Test Type: Ames test

Test system: Bacillus subtilis

Result: negative

Remarks: (IUCLID)

Carcinogenicity

ACGIH: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: BD1200000

Cough, chest pain, difficulty in breathing, gastrointestinal disturbance to the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Liver - Irregularities - Based on Human Evidence

Section 12: Ecological Information

Toxicity: No data available

Persistence and degradability: The methods for determining the biological degradability are not applicable to inorganic substances.

Bioaccumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Endocrine disrupting properties: No data available

Other adverse effects: No ecological problems are to be expected when the product is handled and used with due care and attention

Section 13: Disposal Considerations

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

Material Disposal: Must not be disposed together with household garbage; Disposed it must be in according to the local regulation

Product/Packaging disposal: Dispose of as unused product

Section 14: Transport Information

TDG: Not regulated as a dangerous good

IMDG: Not dangerous goods

IATA: Not dangerous goods

Further Information: Not classified as dangerous in the meaning of transport regulations

Section 15: Regulatory Information

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

Section 16: Other Information

SDS Creation Date 23rd April 2022

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Indication of changes: GHS aligned.

Further information: This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers: Employers should use this information only as a supplement to other information gathered by them and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without



Safety Data Sheet of Activated Alumina Desiccant

According to (EC) 1907/2006,1272/2008

Issue Date: May 21, 2024

warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.