

MOLSIV ADSORBENT

IVYS PART #P400012

1. IDENTIFICATION OF SUBSTANCE/MIXTURE FROM MANUFACTURER

1.1. Product identifier

Product Name	Molsiv Adsorbents
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1.2. Details of the supplier of the substance or mixture:

Supplier	Manufacturer
Ivys Adsorption Inc	
730, Boulevard Industriel	
Blainville, Québec	
Canada J7C 3V4	
Tel +1 450 979 8700	
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1.3. Emergency phone number – 24hours/day, 7 days/week

Medical: 1-800-498-5701 or +1-303-389-1414	Transportation (CHEMTREC): 1-800-424-9300 or +1-703-527-3887
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2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Emergency overview: white to tan beads or pellets, no odor, carcinogenicity, Category 1A,

2.2. Label elements



GHS Label elements, including precautionary statements

Other hazards

Signal word:	Danger
Hazard Statement	May cause cancer by inhalation
Precautionary Statement	Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
Hazards Not Otherwise Classified:	The product gets hot as it first adsorbs water.
Carcinogenicity	
NTP: Quartz (SiO₂) Known Carcinogen	14808-60-7
IARC: Quartz (SiO₂) Group 1: Carcinogenic to humans	14808-60-7
ACGIH: Quartz (SiO₂) A2: Suspected human carcinogen	14808-60-7

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Mixture

Chemical Name	CAS #	Purity %
Zeolite, cuboidal, crystalline, synthetic, non-fibrous	1318-02-1	>70.00%
Mineral Binder		<30.00%
Quartz (SiO ₂)	14808-60-7	<5.00%

Note: Composition as shown represents the chemical composition of the product and is not representing the composition for inventory purposes. See Section 15 for inventory information.

4. FIRST AID MEASURES

4.1. Description of first aid

Skin contact	Wash off with soap and plenty of water. If skin irritation persists, call a physician.
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Eye Contact	Rinse immediately with plenty of water for at least 15 minutes. If eye irritation persists, consult a physician.
Ingestion	Drink at least 2 glasses of water. Obtain medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air. If symptoms persist, call a physician.
Indication of the immediate medical attention and special treatment needed	This product is a desiccant and generates heat as it adsorbs water. The used product can contain material of a hazardous nature. Identify that material and treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media	Not combustible. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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5.2. Special hazards arising from the substance or mixture

Special danger	The product itself does not burn. The used product can retain material of a hazardous nature. Identify that material and inform the fire fighters.
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5.3. Advice for fire-fighters

Special measures for the protection of fire-fighters	In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.
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6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

IF exposed or concerned: Get medical advice/ attention.

6.2. Environmental precautions

No special environmental precautions required.
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6.3. Methods and material for containment and clean up

Sweep, shovel or vacuum spilled product into appropriate containers (do not use a vacuum if material has contacted a hydrocarbon material). Pick up and arrange disposal without creating dust. Never return spills in original containers for re-use. Spilled product should be disposed of in accordance with all applicable government regulations.
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6.4. Reference to other sections

See Section 8.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Store in original container. Keep in a dry place. Store locked up.

7.2. Conditions for safe storage, including any incompatibilities

Handle and open container with care. Avoid dust formation. Avoid contact with skin and eyes. Provide an electrical ground connection during loading and transfer operations to avoid static discharge in an explosive atmosphere and to prevent persons handling the product from receiving static shocks.

7.3. Specific end use(s)

Exposure	No special requirements
Other information	No information available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Components	CAS-No.	Value	Control Parameters	Update	Basis
Zeolite, cuboidal, crystalline, synthetic, non-fibrous	1318-02-1	TWA (Time Weighted Average)	1 mg/m ³	2008	ACGIH: US. ACGIH Threshold Limit Values
Form of exposure: respirable fraction					
Quartz (SiO ₂)	14808-60-7	TWA (Time Weighted Average)	0.025 mg/m ³	2008	ACGIH: US. ACGIH Threshold Limit Values
Form of exposure: respirable fraction					
Quartz (SiO ₂)	14808-60-7	REL: Recommended exposure limit	0.05 mg/m ³	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards
Form of exposure: respirable dust					
Quartz (SiO ₂)	14808-60-7	TWA: Time Weighted Average	0.1 mg/m ³	1989	Z1A: US. OSHA Table Z-1-A (29 CFR 1910.1000)
Form of exposure: respirable dust					

Quartz (SiO ₂)	14808-60-7	TWA: Time Weighted Average	2.4 millions of particles per cubic foot of air. The exposure limit is calculated from the equation, $250/(\%SiO_2+5)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂	2000	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000)
			will yield higher exposure limits.		
Form of exposure: Respirable					
Quartz (SiO ₂)	14808-60-7	TWA: Time Weighted Average	0.1 mg/m ³ . The exposure limit is calculated from the equation, $10/(\%SiO_2+2)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits.	2000	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000)
Form of exposure: Respirable					
Quartz (SiO ₂)	14808-60-7	TWA: Time Weighted Average	0.3 mg/m ³ . The exposure limit is calculated from the equation, $30/(\%SiO_2+2)$, using a value of 100% SiO ₂ . Lower values of % SiO ₂ will give higher exposure limits	2000	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000)

8.2. Exposure controls

Appropriate engineering controls	Ensure adequate ventilation, especially in confined areas.
Individual protection measures – personal protective equipment	Handle in accordance with good industrial hygiene and safety practice
Eye / Face Protection	Safety Glasses/Goggles
Skin Protection	Work uniform and gloves to prevent prolonged contact.
Respiratory Protection	In case of insufficient ventilation, wear suitable respiratory equipment. Breathing apparatus with filter: NIOSH classification N-100 or if oil/liquid aerosols are present P-100 (42 CFR 84).
Hand Protection	Protective Gloves

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Beads or Pellets
Colour	White to Tan
Odour	None
pH	N/A
Melting Point	> 400 °C
Boiling Point	N/A
Flash Point	N/A
Density	> 2.0 g/cm ³
Specific Gravity	> 1.0
Water Solubility	Insoluble
Solubility in Other Solvents	Insoluble

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Incompatible Materials	Sudden contact with high concentrations of chemicals having high heats of adsorption such as olefins, HCl, etc. When first wetted, the product can heat up to the boiling point of water. Flood with water to cool material
Hazardous decomposition products	No decomposition if used as directed. Hydrocarbons and other materials that contact the product during normal use can be retained on the product. It is reasonable to expect that decomposition products will come from these retained materials of use.

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	LD50 Oral: > 32,000 mg/kg. Species: Rat
Acute Inhalation Toxicity	No data available
Acute dermal Toxicity	LD50 Dermal: > 2,000 mg/kg. Species: Rabbit
Skin Irritation	Species: Rabbit. Classification: Not classified as a skin irritant in animal testing.
Eye Irritation	Species: Rabbit. Result: mild transient effects
Further Information	Note: The toxicological data has been taken from products of similar composition.

12. ECOLOGICAL INFORMATION

12.1. Eco-toxicity Effects

Toxicity to fish:	No data available
Toxicity to Daphnia and Other Aquatic Invertebrates	No data available
Toxicity to Algae	No data available

12.2. Elimination Information (Persistence and degradability)

Bioaccumulative potential	No data available
Mobility	No data available
Biodegradability	No data available
Other Information	No information on ecology available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Treatment Methods:	Dispose of contents/ container to an approved waste disposal plant.
Additional Information :	<p>This product (in its fresh unused state) is not listed by generic name or trademark name in the U.S. EPA's RCRA regulations and does not possess any of the four identifying characteristics of hazardous waste (ignitability, corrosivity, reactivity or toxicity).</p> <p>Materials of a hazardous nature that contact the product during normal use may be retained on this product. The user of the product must identify the hazards associated with the retained material in order to assess the waste disposal options.</p>

14. TRANSPORT INFORMATION

DOT	Not dangerous goods
TDG	Not dangerous Goods
IMDG	Not dangerous goods

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific to the substance or mixture:

US. Toxic Substances Control Act	On the inventory, or in compliance with the inventory	
Australia. Industrial Chemical (Notification and Assessment) Act	On the inventory, or in compliance with the inventory	
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)	All components of this product are on the Canadian DSL.	
Japan. Kashin-Hou Law List	On the inventory, or in compliance with the inventory	
Korea. Toxic Chemical Control Law (TCCL) List	On the inventory, or in compliance with the inventory	
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	On the inventory, or in compliance with the inventory	
China. Inventory of Existing Chemical Substances	On the inventory, or in compliance with the inventory	
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	On the inventory, or in compliance with the inventory	
Note: Zeolites are considered Statutory Mixtures for Inventory purposes,		
SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.	Quartz (SiO ₂) 14808-60-7
SARA 313 Components	This material does not contain any chemical components with known CAS numbers that exceed the	Quartz (SiO ₂) 14808-60-7

	threshold (De Minimis) reporting levels established by SARA Title III, Section 313.	
SARA 311/312 Hazards	Chronic Health Hazard	
California Prop. 65	WARNING! This product contains a chemical known to the State of California to cause cancer.	Quartz (SiO ₂) 14808-60-7
Massachusetts RTK		Quartz (SiO ₂) 14808-60-7
New Jersey RTK		Quartz (SiO ₂) 14808-60-7
Pennsylvania RTK		Quartz (SiO ₂) 14808-60-7
WHMIS Classification	D2A: Very Toxic Material Causing Other Toxic Effects. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR	

16. OTHER INFORMATION

Health Hazard	HMIS III: 1Chronic Health Hazard NFPA: 1
Flammability	HMIS III: 0 NFPA: 0
Physical Hazard	HMIS III: 1
Instability	NFPA: 1
Hazard rating and rating systems (e.g. HMIS [®] III, NFPA): This information is intended solely for the use of individuals trained in the particular system.	
Abbreviations and Acronyms	
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
CLP	EU regulation (EC) No 1272/2008 on classification, labelling and packaging of chemical substances and mixtures.
CAS	Chemical Abstracts Service (division of the American Chemical Society).
EINECS	European Inventory of Existing Commercial chemical Substances.
IARC	International agency for research on cancer.

RID	European Rail Transport.
IMDG	International Maritime Code for Dangerous Goods.
IATA	International Air Transport Association.
OSHA	The United States Occupational Safety and Health Administration.
DSD	Dangerous Substance Directive (67/548/EEC).
TSCA	Toxic Substances Control Act, The American chemical inventory.
RCRA	The Resource Conservation and Recovery Act of United States.
CERCLA	The Comprehensive Environmental Response, Compensation, and Liability Act of United States.
SARA/TITLE III	The Emergency Planning and Community Right-to-Know Act.
DSL	Domestic Substances List, The Canadian chemical inventory.
AICS	The Australian Inventory of Chemical Substances.
ECL	Existing Chemicals List, the Korean chemical inventory.
PICCS	Philippine Inventory of Chemicals and Chemical Substances.
MITI	Ministry of International Trade and Industry.
IECSC	Inventory of existing chemical substances in China.

Notice to End User:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.