

Safety Data Sheet



Product name:


Ionex[®] Type Ag 400

Revised edition no: I65 - Rev H

Date: 25 Aug 2023

Supersedes: Revision edition no: I65 – Rev F

1 PRODUCT AND COMPANY IDENTIFICATION	
Product Name	Ionex [®] Type Ag 400
CAS Number	130328-18-6
Product Use	Adsorbent
Supplier / Manufacturer's Name	Molecular Products Inc (a subsidiary of Molecular Products Group) 633 CTC Blvd., Louisville, CO, 80027 USA
Emergency Contact	1-888-665-7763 (Hours: 7:00AM – 5:00PM Mountain Time)
Date of Initial Preparation	19 February 2001
Date of Previous Revision	4 January 2017

2 HAZARDS IDENTIFICATION	
Emergency Overview	This material when exposed to water can become hot and heat to the boiling point of water.
GHS Hazard Symbols	 Signal Word: Warning!
GHS Hazard Classification(s)	Skin Irritation Category 3 Eye Irritation Category 2B Specific Target Organ Toxicity-Single Exposure Respiratory Irritant Category 3
Hazard Statement(s)	H316: Causes Mild Skin Irritation H320: Causes Eye Irritation H335: May Cause Respiratory Irritation
Precautionary Statement(s)	P264: Wash Hands Thoroughly After Handling P261: Avoid Breathing Dust P271: Use Only Outdoors or in Well-Ventilated Area P304 + P340: IF INHALED Remove Person to Fresh Air and Keep Comfortable for Breathing P305 + P351 + P338: IF IN EYES Rinse with Water Cautiously for Several Minutes, Remove Contact Lenses if Present and Easy to Do, Continue Rinsing. P337 + P313: If Eye Irritation Persists Get Medical Attention P312: Call a POISON CENTER/ Doctor if You Feel Unwell P332 + P313: If Skin Irritation Occurs Get Medical Attention P403: Store in a Well-Ventilated Place P405 + P233: Store Locked Up. Keep Container Tightly Closed. P501: Dispose of Containers In Accordance with Local/ Regional/ National/ International Regulations
Other Hazard Information	This material when exposed to water can become hot and heat to the boiling point of water. Flood with water to reduce the temperature.

3 COMPOSITION AND INFORMATION ON INGREDIENTS			
Composition	Silver Zeolite		
Substance name	Content	CAS No	Classification
Silver-Exchanged Zeolite	85 – 100%	130328-18-6	Hazard Classification: [Xi] Irritant
Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).			

4 FIRST-AID MEASURES	
Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention if necessary. Take copy of label and/or SDS to health professional with contaminated individual.	
Eye Contact	If product enters the eyes, open eyes while under gently running water for at least 15 minutes. Seek medical attention.
Skin Contact	Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing, launder before re-use.

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4 FIRST-AID MEASURES		
Inhalation		If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.
Ingestion		If product is swallowed, have victim drink 1-3 glasses of water to dilute contents of stomach, call physician or poison control center for most current information. If professional advice not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.
Health Hazards or Risk from Exposure		<p><i>Acute:</i> Exposure to this product can cause mechanical irritation to eyes, respiratory system and skin</p> <p><i>Inhalation:</i> Inhalation dust may cause nose, throat and respiratory tract irritation <i>Eye:</i> May cause mechanical irritation as well as pain and redness, avoid contact with eyes. <i>Skin:</i> May cause mechanical irritation, avoid contact with skin.</p> <p><i>Ingestion:</i> May cause irritation to gastrointestinal tract <i>Chronic:</i> None known</p>
Target Organs		<p><i>Acute:</i> Eye, Respiratory System, Skin <i>Chronic:</i> None known</p>
Medical Conditions Aggravated by Exposure		Pre-existing skin, respiratory system or eye problems may be aggravated by prolonged contact.
Recommendations to Physicians		Treat symptoms and reduce over-exposure.

5 FIRE-FIGHTING MEASURES		
Flash Point		Non-Flammable
Auto-Ignition Temperature		Not Applicable
Flammable Limits (in air by volume, %)		<p><i>Lower (LEL):</i> Not Applicable <i>Upper (UEL):</i> Not Applicable</p>
Fire Extinguishing Materials		As appropriate for surrounding fire. Carbon dioxide, foam, dry chemical, halon, or water spray. Do not release runoff from fire control methods to sewers or waterways.
Unusual Fire and Explosion Hazards		This product may give rise to hazardous fumes in a fire. When exposed to water zeolites can become hot and heat to the boiling point of water. Flooding with water will reduce the temperature to safe limits.
Explosion Sensitivity to Mechanical Impact		Not Sensitive
Explosion Sensitivity to Static Discharge		Not Sensitive
Special Fire-Fighting Procedures		Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

6 ACCIDENTAL RELEASE MEASURES		
Spill and Leak Response		Personnel should be trained for spill response
Spill Response PPE		Coveralls, dust mask, safety glasses or goggles, nitrile gloves
Clean up Procedure		Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Sweep, shovel or vacuum (HEPA vacuum) spilled material and place in an appropriate container for re-use or disposal. Avoid dust generation if possible. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

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7 HANDLING AND STORAGE	
Work Practices and Hygiene Practices	<p>As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing dusts generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.</p> <p>As with all finely divided materials, precautions should be taken to avoid inhalation and eye contact. Ground all transfer, blending and dust collecting equipment to prevent static discharge in accordance with NFPA 70, "National Electric Code;" NFPA 499, "Recommended Practice for the Classification of Combustible Dusts and of Hazardous (classified) Locations for Electrical Installations in Chemical Process Areas;" NFPA 654, "Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids" and OSHA Combustible Dust standards. Remove all ignition sources from material handling, transfer and processing areas where dust may be present.</p>
Storage and Handling Practices	Containers of this product must be properly labeled. Store containers in a cool, dry location away from heat, flame and incompatible materials. Keep container tightly closed when not in use. Avoid buildup of static charge in handling equipment.
Incompatible Materials	Avoid contact with strong reducing agents, water.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION			
Exposure Limits/Guidelines	Either local exhaust or general room ventilation is usually required		
Chemical Name	CAS #	ACGIH TWA	OSHA TWA
Silver-exchanged Zeolite	130328-18-6	None	None
Currently, International exposure limits are established for the components of this product. Please check with competent authority in each country for the most recent limits in place.			
Ventilation and Engineering Controls			
Use local exhaust ventilation to control airborne dust. Ensure eyewash/safety shower stations are available near areas where this product is used.			
Personal Protective Equipment			
The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.			
Respiratory Protection	Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.		
Eye protection	Safety glasses or chemical goggles are recommended. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.		
Hand Protection	Use protective gloves to minimize skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.		
Body Protection	Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.		

9 PHYSICAL AND CHEMICAL PROPERTIES	
Physical State	Solid
Appearance and Odor	Yellow or beige Solid with no odor
Odor Threshold (PPM)	None
Vapor Pressure (mmHg)	Not Applicable
Vapor Density (AIR=1)	Not Applicable

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Density		0.5 – 1.0 g/ml
Evaporation Rate (nBuAc=1)		Not Applicable
Boiling Point (°C)		Not Determined
Freezing Point (°C)		Not Applicable
pH		No data available
Specific Gravity 4° C (Water=1)		0.5 – 1.0
Solubility in Water (%)		Insoluble
VOC		0
Upper Explosive Limit		Not Applicable
Lower Explosive Limit		Not Applicable
Flammability		Not Applicable
Partition Coefficient		Not Applicable
Decomposition Temperature		Not Determined
Viscosity		Not Applicable

10 STABILITY AND REACTIVITY		
Stability		Product is stable
Decomposition Products		Thermal decomposition (burning) may produce irritating fumes of: oxides of aluminum, oxides of silicon, oxides of sodium and oxides of silver.
Materials with which Substance is Incompatible		Avoid contact with strong reducing agents and water
Hazardous Polymerization		Will not occur
Conditions to Avoid		Contact with incompatible materials, dust generation, and contact with water

11 TOXICOLOGICAL INFORMATION		
Toxicity: There is no available data for the product, or for the components.		
Suspected Cancer Agent		None of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore is not considered to be, nor suspected to be a cancer-causing agent by these agencies.
Irritancy		Contact with this product can cause mechanical irritation to exposed skin, eyes and respiratory system.
Sensitization		This product is not considered a sensitizer.
Reproductive Toxicity		No information concerning the effects of this product and its components on the human reproductive system.
Health Hazards or Risks from Exposure		<p><i>Acute:</i> Exposure to this product may cause mechanical irritation to eyes, respiratory system and skin</p> <p><i>Inhalation:</i> Avoid use in confined spaces. Inhalation dust may cause nose, throat and respiratory tract irritation</p> <p><i>Eye:</i> May cause mechanical irritation as well as pain and redness, avoid contact with eyes.</p> <p><i>Skin:</i> May cause mechanical irritation, avoid contact with skin.</p> <p><i>Ingestion:</i> May cause irritation to gastrointestinal tract</p> <p><i>Chronic:</i> None known</p>
Routes of Exposure		<p><i>Acute:</i> Eye, Respiratory System, Skin</p> <p><i>Chronic:</i> None known</p>

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12 ECOLOGICAL INFORMATION	
All work practices must be aimed at eliminating environmental contamination.	
Environmental Stability	The ecological characteristics of this product have not been fully investigated. The product should not be discharged unmonitored into the environment.
Effect of Material on Plants or Animals	No evidence is currently available on this product's effects on plants or animals.
Effect of Chemical on Aquatic Life	No data available for this product at this time.
<i>Note: This product is readily biodegradable and is not expected to bio-accumulate</i>	

13 DISPOSAL CONSIDERATIONS	
Preparing Wastes for Disposal	Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan. Use only appropriate containers for disposal and do not discharge any waste into the local water system.

14 TRANSPORTATION INFORMATION	
U.S. DOT, IATA, IMO, and ADR	Non-Regulated Material
Proper Shipping Name	Non-Regulated Material
Hazard Class Number and Description	Not Applicable
U.N. Identification Number	Not Applicable
Packing Group	Not Applicable
DOT Label(s) Required	Not Applicable
North American Emergency Response Guidebook Number (2004)	Not Applicable
Marine Pollutant	None of the ingredients are classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)
U.S. Department of Transportation (DOT) Shipping Regulations	This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.
Transport Canada, Transportation of Dangerous Good Regulation	This product is not classified as Dangerous Goods, per regulations of Transport Canada
International Air Transport Association (IATA)	This product is not classified as Dangerous Goods, by rules of IATA.
International Maritime Organization (IMO) Designation	This product is not classified as Dangerous Goods by the International Maritime Organization.
European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)	This product is not classified by the United Nations Economic Commission for Europe to be dangerous goods.

15 REGULATORY INFORMATION	
United States Regulations	
SARA Reporting Requirements	This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act., as follows:
Toxic Control Substance Act (TCSA)	None of the components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.
SARA 311/312	Acute Health: Yes Chronic Health: No Fire: No Reactivity: No
SARA 313	This product does not contain any components that exceed the reporting threshold established by SARA Title III, Section 313

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15 REGULATORY INFORMATION	
U.S. SARA Threshold Planning Quantity	There are no specific Threshold Planning Quantities for this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.
U.S. CERCLA Reportable Quantity (RQ)	CERCLA Reportable Quantity (RQ), None.
Clean Water Act (CWA)	None of the chemicals in this product are listed as Hazardous Substances under the CWA.
State Regulations	None
California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)	None of the ingredients are on the California Proposition 65 lists.
Canadian Regulations	
Canadian DSL/NDL Inventory Status	None of the components of this product are on the DSL Inventory
Canadian Environmental Protection Act (CEPA) Priorities Substances Lists	No component of this product is on the CEPA First Priorities Substance Lists.

16 OTHER INFORMATION	
Prepared By	Molecular Products, Inc.
Disclaimer: The information in this safety data sheet is based on the best knowledge available at the time and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular application. As the specific conditions of use are outside the control of the supplier, the user is responsible for ensuring that the product is used in a safe way and in compliance with the relevant requirements of legislation.	
Date of issue	25 August 2023