

Safety Data Sheet



Product name:

Ionex[®] – Type OP Catalyst

Revised edition no: 179 - Rev F

Date: 07 June 2023

Supersedes: 179 – Rev E

Section 1	PRODUCT AND COMPANY IDENTIFICATION	
	Product Name	Ionex [®] – Type OP Catalyst, Hydrous Ferric Oxide
	CAS Number	1309-37-1, 215-168-2
	Product Use	Catalyst
	U.N. Number	Not Applicable
	U.N. Dangerous Goods Class	Non-Regulated Material
	Supplier / Manufacturer's Name	Molecular Products Inc (a subsidiary of Molecular Products Group) 633 CTC Blvd., Louisville, CO, U.S.A, 80027
	Emergency Contact	1-888-665-7763 (Hours: 7:00AM – 5:00PM Mountain Time)
	Date of Initial Preparation	03-19-2001
	Date of Previous Revision	07-26-2019

Section 2	HAZARDS IDENTIFICATION	
	Emergency Overview	This product is an amorphous black solid with no odor.. Exposure can be irritating to eyes, respiratory system and skin. Harmful by inhalation and ingestion. It is a nonflammable solid. The Environmental effects of this product have not been investigated; however, this product may have adverse effects in the aquatic environment.
	US DOT Symbols	Not classified as hazardous.
	Canadian (WHMIS) Symbols	Not classified as hazardous.
	European and (GHS) Hazard Symbols	None
	EU Labelling and Classification	Not classified as hazardous.
	GHS Hazard Classification(s)	Not classified as hazardous.
	Hazard Statement(s)	Not classified as hazardous.
	Precautionary Statement(s)	P264: Wash hands thoroughly after handling P270: Do not eat, drink or smoke when using this product P301+312: If swallowed: contact a poison center or doctor if you feel unwell P330: Rinse mouth P501: Dispose contents/containers in accordance with local/regional/national regulations
	EU Hazard Classification per Directive 1999/45/EC	None

Safety Data Sheet



Product name:
Ionex[®] – Type OP Catalyst

Revised edition no: 179 - Rev F
Date: 07 June 2023
Supersedes: 179 – Rev E

Section 2	HAZARDS IDENTIFICATION	
Risk Phrases	Not classified as hazardous.	
Safety Phrases	S9: Keep container in well-ventilated area. S22: Do not breathe dust. S24/25: Avoid contact with skin and eyes. S36/37/38: Wear suitable protective clothing, gloves and eye/face protection.	
Health Hazards or Risks from Exposure	Acute: Exposure to this product can be irritating to eyes, respiratory system and skin. Inhalation: Inhalation of dusts may cause nose, throat and respiratory tract irritation. Eye: May cause mechanical irritation with pain and redness. Skin: May cause irritation. Ingestion: May cause irritation to gastrointestinal tract. Chronic: None known.	
Target Organs	Acute: Eye, Respiratory System, Skin Chronic: None known	

Section 3	COMPOSITION AND INFORMATION ON INGREDIENTS			
	Hazardous Ingredients	CAS #	WT %	Hazard Classification / Risk Phrases
	Hydrous Ferric Oxide	1309-37-1 215-168-2	100%	None

Section 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 MSDS to health professional with contaminated individual.	
Eye Contact	Immediately flood the eye with water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.	
Skin Contact	Wash thoroughly with soap and water. Obtain medical attention if skin irritation persists.	
Inhalation	Exposure to this product can cause mechanical irritation to respiratory system by inhalation of dust. Move to clean air, seek medical attention if symptoms persist.	
Ingestion	If product is swallowed, call physician or poison control center for most current information. If professional advice is 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.	
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.	

Safety Data Sheet



Product name:
Ionex[®] – Type OP Catalyst

Revised edition no: 179 - Rev F
Date: 07 June 2023
Supersedes: 179 – Rev E

Section 5	FIRE-FIGHTING MEASURES	
	Flash Point	Not Applicable
	Auto-Ignition Temperature	Not Applicable
	Flammable Limits (in air by volume, %)	Not Applicable
	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	Not Applicable
	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.

Section 6	ACCIDENTAL RELEASE MEASURES	
	Spill and Leak Response	Personnel should be trained for spill response operations.
	Spills	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).

Section 7	HANDLING AND STORAGE	
	Work Practices and Hygiene Practices	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. Do not enter places where bulk material is used or stored until adequately ventilated to prevent asphyxiation.
	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. Provide appropriate local exhaust ventilation at machinery and at places where dust can be generated.

Safety Data Sheet



Product name:

Ionex[®] – Type OP Catalyst

Revised edition no: 179 - Rev F

Date: 07 June 2023

Supersedes: 179 – Rev E

Section 8	EXPOSURE CONTROLS / PERSONAL PROTECTION			
	Exposure Limits/Guidelines			
	Chemical Name	CAS #	ACGIH TWA	OSHA TWA
	Hydrous Ferric Oxide	1309-37-1, 215-168-2	10 mg/m ³ Dust	5 mg/m ³ (respirable), 15 mg/m ³ (total)
	Ventilation and Engineering Controls			
	Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. 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 to 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 Standards of Canada.		
	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.		

Section 9	PHYSICAL AND CHEMICAL PROPERTIES	
	Physical State	Granule
	Appearance and Odor	Black to dark red
	Odor Threshold (PPM)	Odorless
	Vapor Pressure (mmHg)	No data
	Vapor Density (AIR=1)	No data
	Density	> 1.0 g/ml
	Evaporation Rate (nBuAc=1)	No data
	Boiling Point (°C)	No data
	Freezing Point (°C)	No data
	pH	No data
	Specific Gravity 4° C (Water=1)	1.23
	Solubility in Water (%)	Insoluble
	VOC	Not Applicable

Safety Data Sheet



Product name:

Ionex[®] – Type OP Catalyst

Revised edition no: 179 - Rev F

Date: 07 June 2023

Supersedes: 179 – Rev E

Section 10	STABILITY AND REACTIVITY	
	Stability	Stable under normal conditions.
	Decomposition Products	Acrid smoke and irritating fumes
	Materials with which Substance is Incompatible	Hydrazine - calcium hypochlorite - performic acid
	Hazardous Polymerization	Will not occur.
	Conditions to Avoid	Heat - High temperatures

Section 11	TOXICOLOGICAL INFORMATION	
	Toxicity:	Low order of acute toxicity predicted
	LD50 Oral - Rat > 10,000 mg/kg	> 10,000 mg/kg
	Suspected Cancer Agent	This product is not expected to cause long-term adverse health effects.
	Irritancy	This product is not expected to cause irritation.
	Sensitization	This product is not expected to cause sensitization.
	Reproductive Toxicity	This product is not expected to cause reproductive or developmental health effects

Section 12	ECOLOGICAL INFORMATION	
	All work practices must be aimed at eliminating environmental contamination.	
	Environmental Stability	No data available
	Effect of Material on Plants or Animals	No data available
	Effect of Chemical on Aquatic Life	No data available

Section 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.

Safety Data Sheet



Product name:

Ionex[®] – Type OP Catalyst

Revised edition no: 179 - Rev F

Date: 07 June 2023

Supersedes: 179 – Rev E

Section 14	TRANSPORTATION INFORMATION	
	U.S. DOT, IATA, IMO, and ADR	THIS PRODUCT IS NOT HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.
	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 Goods 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: Not restricted per Special Provision A3.
	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.

Section 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: Non
	Toxic Control Substance Act (TCSA)	All components in this product are listed on the U.S. Toxic Control Substance Act (TCSA) inventory of chemicals.
	SARA 311/312	Acute Health: Yes Chronic Health: No Fire: No Reactivity: No
	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 lbs. (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
	State Regulations	None
	California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)	None
	Canadian Regulations	
	Canadian DSL/NDSL Inventory Status	All 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.

Safety Data Sheet



Product name:

Ionex[®] – Type OP Catalyst

Revised edition no: 179 - Rev F

Date: 07 June 2023

Supersedes: 179 – Rev E

Section 15	REGULATORY INFORMATION	
	Canadian WHMIS Classification and Symbols	This product is categorized as Not Controlled, as per the Controlled Product Regulations.
	European Economic Community Information	
	EU Labelling and Classification	Classification of the mixture according to Regulation (EC) No 1272/2008. See Section 2 for details.
	Australian Information for Product	
	Australian Inventory of Chemical Substances (AICS) Status	All components of this product are listed on the AICS.
	Standard for the Uniform Scheduling of Drugs and Poisons	Not applicable
	Japanese Information for Product	
	Japanese Minister of International Trade and Industry (MITI) Status	The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.
	International Chemical Inventories - Listing of the components on individual country Chemical Inventories is as follows.	
	Asia-Pac	Listed
	Australian Inventory of Chemical Substances (AICS)	Listed
	Korea Existing Chemicals List (ECL)	Listed
	Japanese Existing National Inventory of Chemical Substances (ENCS)	Listed
	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Listed
	Swiss Giftliste List of Toxic Substances	Listed
	U.S. TSCA	Listed

Section 16	OTHER INFORMATION	
	NFPA Ratings	HMIS Ratings
	Code for Flammability: 0	Code for Flammability: 0
	Code for Health: 1	Code for Health: 1
	Code for Reactivity: 0	Code for Reactivity: 0
	Code for Special Hazards: None	Code for Personal Protection - See Section 8
	PREPARED BY	Angie Hellstern, Molecular Products, Inc. Assisted by: Jamie Hern, R&D Manager
	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	07 June 2023