

Material Safety Data Sheet

MSDS

MX

Section 1 - Chemical Product and Company Identification

Substance : MX

Recommended use : Laboratory chemicals, Testing, Research and Industrial use Restriction of use : Not for use other than for non-drinking, testing, research and industrial purposes Company Identification Company : OCI Company Ltd.

Address : 94, Sogong-ro, Jung-gu, Seoul, KOREA Tel No. : 82 - 2 - 727 - 9494

Section 2 - Hazards Identification

Hazard Classification
Specific target organ toxicity following single exposure: 3(Respiratory System)
Warning signal

Symbol



5	Signal word	Warning	
ł	Hazard statement	H335 May cause respiratory irritation	
F	revention precautionary statements		
		P261 Avoid breathing dust/fume/gas/mist/vapours/spray.	
		P271 Use only outdoors or in a well-ventilated area.	
		P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a	
		position comfortable for breathing.	
		P312 Call a POISON CENTER or doctor/physician if you feel unwell.	
		P403+P233 Store in a well-ventilated place. Keep container tightly closed.	
		P405 Store locked up.	
		P501 Dispose of contents/container to	
3)	NFPA		
	Health Rating		
	Flammability Rating		
	Reactivity Rating		

Section 3 - Composition, Information on Ingredients

Component: Potassium Sulfate CAS No.: 7778-80-5 Content: > 99

COMPONENT: MX CAS No.: 3051-09-0 Content: < 1

Section 4 - First Aid Measures

General information:Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

Ingestion: Rinse mouth thoroughly. Call a POISON CENTER or doctor/physician if you feel unwell.

Inhalation: Move to fresh air. Get medical attention if symptoms persist.

Skin contact:Wash skin thoroughly with soap and water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.

Eye contact: Flush thoroughly with water for at least 15 minutes. Get medical assistance.

Most important symptoms/effects, acute and delayed

Symptoms: May cause irritation to skin, eyes, and respiratory tract.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically. Symptoms may be delayed.

Section 5 - Fire Fighting Measures

General fire hazards: The product is non-combustible.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media:None known.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures:Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out. **Special protective equipment for fire-fighters:**Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:Keep unauthorized personnel away. Use personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment.

Methods and material for containment and cleaning up:Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.

Notification Procedures:Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

Environmental precautions:Do not contaminate water sources or sewer. Avoid discharge into drains, water courses or onto the ground.

Section 7 - Handling and Storage

Precautions for safe handling:Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities:Keep containers tightly closed. Store in cool, dry place. Store in a well-ventilated place.

Section 8 - Exposure Controls, Personal Protection

Control parameters

Occupational exposure limitsNone of the components have assigned exposure limits.

Appropriate engineering controlsNo data available.

Individual protection measures, such as personal protective equipment

General information:Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection: Use tight fitting goggles if dust is generated.

Skin protection

Hand protection:Wear protective gloves.

Other:Wear suitable protective clothing.

Respiratory protection: In case of inadequate ventilation use suitable respirator.

Hygiene measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Avoid contact with eyes, skin, and clothing.

Section 9 - Physical and Chemical Properties

Appearance Physical state:Solid Form:Granules Color:White Odor:Odorless Odor threshold:No data available. pH:7 Melting point/freezing point:1069 °C Initial boiling point and boiling range:1698 °C Flash Point:-No data available.) Evaporation rate:No data available. Flammability (solid, gas): No data available

Upper/lower limit on flammability or explosive limits Flammability limit - upper (%):No data available Flammability limit - lower (%):No data available Explosive limit - upper (%):No data available. Explosive limit - lower (%):No data available. Vapor pressure: 0.4 mmHg Vapor density: No data available. Relative density: 2.66 Solubility(ies) Solubility in water: No data available. Solubility (other): No data available. Partition coefficient (n-octanol/water):-No data available. Auto-ignition temperature: No data available. Decomposition temperature: No data available. Viscosity:No data available. Other information Molecular weight: 174.27

Section 10 - Stability and Reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid:Contact with incompatible materials.

Incompatible materials: Aluminum. Magnesium.

Hazardous decomposition products: Oxides of sulfur. Oxides of potassium.

Section 11 - Toxicological Information

Information on likely routes of exposure

Ingestion: May cause irritation of the gastrointestinal tract.

Inhalation: May cause irritation to the respiratory system.

Skin contact: May cause irritation.

Eye contact: May cause temporary eye irritation.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product: No data available.

Dermal Product: No data available.

Inhalation Product: No data available.

Repeated dose toxicity Product: No data available.

Skin corrosion/irritation Product: May cause skin irritation.

Serious eye damage/eye irritation Product: May irritate eyes.

Respiratory or skin sensitization Product: Not a skin sensitizer.

Carcinogenicity Product: This substance has no evidence of carcinogenic properties.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: No carcinogenic components

identified

US. National Toxicology Program (NTP) Report on Carcinogens: No carcinogenic components identified US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): No carcinogenic components identified

Germ cell mutagenicity

In vitro Product: No mutagenic components identified In vivo Product: No mutagenic components identified Reproductive toxicity Product: No components toxic to reproduction Specific target organ toxicity - single exposure Product: None known. Specific target organ toxicity - repeated exposure Product: None known. Aspiration hazard Product: Not classified Other effects: None known.

Section 12 - Ecological Information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish Product: No data available.

Aquatic invertebrates Product: No data available.

Chronic hazards to the aquatic environment:

Fish Product: No data available.

Aquatic invertebrates Product: No data available.

Toxicity to Aquatic Plants Product: No data available.

Persistence and degradability

Biodegradation Product: There are no data on the degradability of this product.

BOD/COD ratio Product: No data available.

Bioaccumulative potential

Bioconcentration factor (BCF) Product: No data available on bioaccumulation.

Partition coefficient n-octanol / water (log Kow) Product: No data available.

Mobility in soil: The product is water soluble and may spread in water systems.

Other adverse effects:The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Section 13 - Disposal Considerations

Disposal instructions:

Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated packaging:

Since emptied containers retain product residue, follow label warnings even after container is emptied.

Section 14 - Transport Information

DOT Not regulated. **IMDG** Not regulated.

IATA Not regulated.

Section 15 - Regulatory Information

US federal regulations			
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)			
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)			
None present or none present in regulated quantities.			
CERCLA Hazardous Substance List (40 CFR 302.4):			
None present or none present in regulated quantities.			
Superfund amendments and reauthorization act of 1986 (SARA)			
Hazard categories Not listed.			
SARA 302 Extremely hazardous substance			
None present or none present in regulated quantities.			
SARA 304 Emergency release notification			
None present or none present in regulated quantities.			
SARA 311/312 Hazardous chemical			
None present or none present in regulated quantities.			
SARA 313 (TRI reporting)			
None present or none present in regulated quantities.			
Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)			
None present or none present in regulated quantities.			
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)			
None present or none present in regulated quantities.			
US state regulations			
US. California Proposition 65			
No ingredient regulated by CA Prop 65 present.			
US. New Jersey Worker and Community Right-to-Know Act			
No ingredient regulated by NJ Right-to-Know Law present.			
US. Massachusetts RTK - Substance List			
No ingredient regulated by MA Right-to-Know Law present.			
US. Pennsylvania RTK - Hazardous Substances			
No ingredient regulated by PA Right-to-Know Law present.			
US. Rhode Island RTK			
No ingredient regulated by RI Right-to-Know Law present.			
Inventory Status:			
Australia AICS: On or in compliance with the inventory			
Canada DSL Inventory List: On or in compliance with the inventory			
EINECS, ELINCS or NLP: On or in compliance with the inventory			
Japan (ENCS) List: On or in compliance with the inventory			
China Inv. Existing Chemical Substances: Not in compliance with the inventory.			
Korea Existing Chemicals Inv. (KECI):On or in compliance with the inventory			
Canada NDSL Inventory: Not in compliance with the inventory.			
Philippines PICCS:On or in compliance with the inventory			
US TSCA Inventory: On or in compliance with the inventory			
New Zealand Inventory of Chemicals: On or in compliance with the inventory			

Japan ISHL Listing:On or in compliance with the inventory Japan Pharmacopoeia Listing:Not in compliance with the inventory.

Section 16 - Other Information

Sources : KOSHA, National Emergency Management Agency Issue date : 09/18/2014 Last updated date : 08/01/2017 Revision number : 0