

Date of issue: 2019/09/06 Date of revision: 2022/06/20

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking Product identifier: Product name: Sodium molybdate,2-hydrate SDS No. : 7208E-2 Details of the supplier of the safety data sheet Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD. Address: 3-1, Honmachibashi, Chuo-ku,Osaka ,JAPAN Division: Chemical Safety Management Department Telephone number: +81-6-6946-8061 FAX: +81-6-6946-1607 e-mail address: kagakuhinanzenkanri@kishida.co.jp 2. Hazards identification GHS classification and label elements of the product Classification of the substance or mixture **HEALTH HAZARDS** Acute toxicity (Oral): Category 3 Skin corrosion/irritation: Category 2 Serious eye damage/eye irritation: Category 2 Germ cell mutagenicity: Category 2 Carcinogenicity: Category 2 Reproductive toxicity: Category 2 Specific target organ toxicity - single exposure: Category 3 (Respiratory tract irritation) Specific target organ toxicity - repeated exposure: Category 1(Systemic toxicity, Testes) Specific target organ toxicity - repeated exposure: Category 2(Kidney) Label elements

Signal word: Danger HAZARD STATEMENT Toxic if swallowed Causes skin irritation Causes serious eye irritation Suspected of causing genetic defects Suspected of causing cancer Suspected of damaging fertility or the unborn child May cause respiratory irritation Causes damage to organs through prolonged or repeated exposure(Systemic toxicity, Testes) May cause damage to organs through prolonged or repeated exposure(Kidney) PRECAUTIONARY STATEMENT Prevention Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash contaminated parts thoroughly after handling. Wear protective gloves. Wear eye protection/face protection.



Do not eat, drink or smoke when using this product. Response Get medical advice/attention if you feel unwell. IF exposed or concerned: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician. IF SWALLOWED: Rinse mouth. Storage Store in a well-ventilated place. Keep container tightly closed.

Disposal

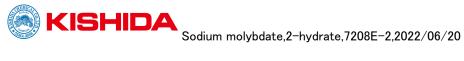
Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Mixture/Substance selection: Substance Ingredient name:Sodium molybdate, 2-hydrate Content (%):98(min) Chemical formula:Na2MoO4 • 2H2O Chemicals No, Japan:1-478 CAS No.:10102-40-6 MW:241.95 Note : The figures shown above are not the specifications of the product.

4. First-aid measures

Descriptions of first-aid measures General measures Get medical advice/attention if you feel unwell. **IF INHALED** Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell. IF ON SKIN (or hair) Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF SWALLOWED Rinse mouth. Immediately call a POISON CENTER/doctor/physician.



Fire-fighting measures	
Extinguishing media	
Suitable extinguishing media	
Use appropriate extinguishing media suitable for surrounding facilities. Unsuitable extinguishing media Unsuitable extinguishing media data is not available. Specific hazards arising from the substance or mixture Containers may explode when heated. Fire may produce irritating, corrosive and/or toxic gases. Advice for firefighters Specific fire-fighting measures Evacuate non-essential personnel to safe area. Special protective equipment and precautions for fire-fighters Wear fire resistant or flame retardant clothing.	
Wear protective gloves/protective clothing/eye protection/face protection.	
Firefighters should wear self-contained breathing apparatus with full face peace operated	d
positive pressure mode.	
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Accidental release measures	
Personnel precautions, protective equipment and emergency procedures	
Ventilate area until material pick up is complete.	
Wear proper protective equipment.	
Environmental precautions	
Prevent spills from entering sewers, watercourses or low areas.	
Avoid raising dust.	
Methods and materials for containment and cleaning up	
Sweep up, place in a bag and hold for waste disposal.	
Preventive measures for secondary accident	
Collect spillage.	
Handling and storage	
Precautions for safe handling	
Precautions for safe handling Preventive measures	
Preventive measures	
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Wash contaminated parts thoroughly after handling. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

Storage

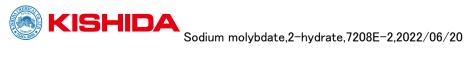
Conditions for safe storage Keep container tightly closed. Store in a cool, dry place. Do not store in direct sunlight. Container and packaging materials for safe handling Glass Polyethylene

8. Exposure controls/personal protection

Control parameters
Exposure controls
Appropriate engineering controls
Do not use in areas without adequate ventilation.
Eye wash station should be available.
Washing facilities should be available.
Individual protection measures
Respiratory protection.
Hand protection
Wear protective gloves.
Eye protection
Wear eye/face protection.

9. Physical and Chemical Properties

Information on basic physical and chemical properties Physical state: Crystals or crystalline powder Color: Colorless to white Odor: Odourless Melting point/Freezing point data is not available. Boiling point or initial boiling point data is not available. Boiling range data is not available. Flammability (gases, liquids and solids) data is not available. Lower and upper explosion limit/flammability limit data is not available. Flash point data is not available. Auto-ignition temperature data is not available. Decomposition temperature data is not available. pH: 9-10 (5w/v%,25°C) Kinematic viscosity data is not available. Solubility: Solubility in water: Soluble n-Octanol/water partition coefficient data is not available. Vapor pressure data is not available. Density and/or relative density: 2.37 Relative vapor density (Air=1) data is not available. Particle characteristics data is not available.



. Stability and Reactivity	
Reactivity	
Not available.	
Chemical stability	
Stable under normal storage/handling conditions.	
Possibility of hazardous reactions	
(As sodium molybdate,anhydride)	
Decomposes on heating. This produces toxic fumes including sodium oxide. Reacts violently	
with halogens. This generates fire and explosion hazard. (ICSC 1010)	
Conditions to avoid	
Contact with incompatible materials.	
Contact with fire source.	
Incompatible materials	
Halogens	
Hazardous decomposition products	
Sodium oxide	
Table signification	
. Toxicological Information Information on toxicological effects	
Acute toxicity	
Acute toxicity (Oral)	
[Company proprietary data]	
(Sodium molybdate, 2-hydrate)	
(As sodium molybdate, anhydride)	
rat LD50=250 mg/kg (Risk Assessment of the Ministry of the Environment vol.10(2012))	
Irritant properties	
Skin corrosion/irritation	
[Company proprietary data]	
(Sodium molybdate, 2-hydrate)	
As sodium molybdate, 2 hydrate	
Serious eye damage/irritation	
[Company proprietary data]	
(Sodium molybdate, 2–hydrate)	
As sodium molybdate,anhydride category2	
Allergenic and sensitizing effects data is not available.	
Germ cell mutagenicity	
[Company proprietary data]	
(Sodium molybdate, 2–hydrate)	
As sodium molybdate,anhydride category2	
Carcinogenicity	
[Company proprietary data]	
(Sodium molybdate, 2-hydrate)	
As sodium molybdate,anhydride category2	
Reproductive toxicity	
[Company proprietary data]	
(Sodium molybdate, 2-hydrate)	
As sodium molybdate,anhydride category2	
STOT	
STOT-single exposure	
[cat.3 (resp. irrit.)]	
[cat.3 (resp. ırrıt.)] [Company proprietary data]	



Respiratory tract irritation (As sodium molybdate,anhydride) STOT-repeated exposure [cat.1] [Company proprietary data] (Sodium molybdate, 2-hydrate) (As sodium molybdate,anhydride) Systemic toxicity, Testes [cat.2] [Company proprietary data] (Sodium molybdate, 2-hydrate) (As sodium molybdate, 2-hydrate) (As sodium molybdate,anhydride) Kidney Aspiration hazard data is not available. Information on other hazards May cause lung disorders by massive inhalation of powdered substance.

-e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung

function, interstitial lung disease, pneumothorax

12. Ecological Information

Ecotoxicity

Ecotoxicity data is not available. Persistence and degradability Persistence and degradability data is not available. Bioaccumulative potential Bioaccumulative potential data is not available. Mobility in soil Mobility in soil data is not available. Other adverse effects

Ozone depleting chemical data is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal,

including the disposal of any contaminated packaging

Waste treatment methods

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No. or ID No.: 3288 UN Proper Shipping Name : TOXIC SOLID, INORGANIC, N.O.S. Class or division (Transport hazard class) : 6.1 Packing group : III ERG GUIDE No.: 151 Special provisions No.: 223; 274 IMDG Code (International Maritime Dangerous Goods Regulations) UN No.: 3288 Proper Shipping Name : TOXIC SOLID, INORGANIC, N.O.S. Class or division : 6.1 Packing group : III Special provisions No.: 223; 274 IATA Dangerous Goods Regulations UN No.: 3288



Proper Shipping Name : TOXIC SOLID, INORGANIC, N.O.S. Class or division : 6.1 Hazard labels : Toxic Packing group : III Special provisions No.: A3; A5 Environmental hazards MARPOL Annex III - Prevention of pollution by harmful substances Marine pollutants (yes/no) : no MARPOL Annex V – Prevention of pollution by garbage discharge Specific target organ toxicity - repeated exposure: cat.1 Sodium molybdate, 2-hydrate

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture Chemicals listed in TSCA Inventory

Sodium molybdate,2-hydrate

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

GHS classification and labelling

Acute Tox. 3: H301 Toxic if swallowed

Skin Irrit. 2: H315 Causes skin irritation

Eye Irrit. 2: H319 Causes serious eye irritation

Muta. 2: H341 Suspected of causing genetic defects

Carc. 2: H351 Suspected of causing cancer

Repr. 2: H361 Suspected of damaging fertility or the unborn child

STOT SE 3: H335 May cause respiratory irritation

STOT RE 1: H372 Causes damage to organs through prolonged or repeated exposure

STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure

Reference Book

Globally Harmonized System of classification and labelling of chemicals, UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN IMDG Code, 2018 Edition (Incorporating Amendment 39-18) IATA Dangerous Goods Regulations (62nd Edition) 2021 2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2021 TLVs and BEIs. (ACGIH) Supplier's data/information

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2020).