

**Sodium molybdate dihydrate****331058-2.5KG**

Version 1.4

Issuing date 07/22/2016

Revision Date 05/22/2020

Print Date 08/03/2021

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name : Sodium molybdate dihydrate

Number : 000000020206

Recommended use of the chemical and restrictions on use : Laboratory chemicals

Manufacturer or supplier's details : Honeywell Specialty Chemicals Seelze GmbH  
Wunstorfer Straße 40  
Seelze, 30926

For further information, please contact: : 1-800-368-0050  
+1-231-726-3171  
(Monday-Friday, 9:00am-5:00pm)

**In case of emergency call :** **Medical: 1-800-498-5701 or +1-303-389-1414**  
**Transportation (CHEMTREC): 1-800-424-9300 or +1-703-527-3887**  
**In Japan: +(81)-345209637**  
: (24 hours/day, 7 days/week)

**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture**

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

**GHS Label elements, including precautionary statements**

Precautionary statements : **Prevention:**  
Use personal protective equipment as required.

Other hazards which do not result in classification : Repeated or prolonged exposure may irritate eyes, skin and respiratory system.

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

**3. COMPOSITION/INFORMATION ON INGREDIENTS**Formula :  $\text{MoNa}_2\text{O}_4 \cdot 2\text{H}_2\text{O}$

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Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Sodium molybdate-2-hydrate	10102-40-6	>=90.00 - <=100.00 %
Sodium molybdate-2-hydrate		

**4. FIRST AID MEASURES**

General advice : First aider needs to protect himself.  
Move out of dangerous area.  
Take off all contaminated clothing immediately.

Inhalation : If inhaled, remove to fresh air.

Skin contact : After contact with skin, wash immediately with plenty of water.

Eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Ingestion : Rinse mouth with water.  
Call a physician immediately.

Notes to physician : Treat symptomatically.

**5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry powder

Specific hazards during firefighting : Hazardous decomposition products formed under fire conditions.

Special protective equipment for firefighters : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.

Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and : Provide adequate ventilation.  
Avoid dust formation.

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emergency procedures

Environmental precautions : Should not be released into the environment.

Methods and materials for containment and cleaning up : Sweep up and shovel into suitable containers for disposal.

**7. HANDLING AND STORAGE****Handling**Precautions for safe handling : Wear personal protective equipment.  
Use with local exhaust ventilation.  
Avoid dust formation.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

**Storage**Conditions for safe storage, including any incompatibilities : Store in original container.  
Keep containers tightly closed in a dry, cool and well-ventilated place.**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Appropriate engineering controls**

Use with local exhaust ventilation.

**Individual protection measures, such as personal protective equipment**

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.

Hand protection : Latex gloves  
Gloves must be inspected prior to use.  
Replace when worn.

Eye protection : Safety glasses with side-shields

Skin and body protection : Protective suit

Hygiene measures : Keep away from food, drink and animal feedingstuffs.  
Remove and wash contaminated clothing before re-use.  
Wash hands before breaks and at the end of workday.

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Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.  
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.  
Avoid contact with skin, eyes and clothing.  
Avoid breathing dust or spray mist.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state : crystalline

Colour : white

Odour : odourless

pH : 7.0 - 10.0 at , 20 °C

Melting point/range : 100 °C  
Note: Elimination of water of crystallisation

Boiling point/boiling range : Note: no data available

Flash point : Note: Not applicable

Evaporation rate : Note: no data available

Lower explosion limit : Note: Not applicable

Upper explosion limit : Note: Not applicable

Vapour pressure :  
Note: no data available

Vapour density : Note: no data available

Density : ca. 2.700 g/cm<sup>3</sup> at 20 °C

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Water solubility : 840.0 g/l at 20 °C

Partition coefficient: n-octanol/water : Note: no data available

Ignition temperature : Note: Not applicable

Decomposition temperature : 100 °C  
Note: Loss of water of crystallization on heating.

Viscosity, dynamic : Note: no data available

Viscosity, kinematic : Note: no data available

Molecular weight : 241.95 g/mol

Bulk density : ca. 930 kg/m<sup>3</sup>

**10. STABILITY AND REACTIVITY**

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Hazardous polymerisation does not occur.

Conditions to avoid : No information available.

Incompatible materials to avoid : No information available.

**11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity : LD50: 4,233 mg/kg  
Species: Rat  
Method: OECD Test Guideline 401  
Test substance: anhydrous substance

Acute inhalation toxicity : LC50: > 1.93 mg/l , dust/mist  
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Exposure time: 4 h  
Species: Rat  
Test substance: anhydrous substance  
Note: No deaths

Acute dermal toxicity : LD50: > 2,000 mg/kg  
Species: Rat  
Method: OECD Test Guideline 402  
Test substance: anhydrous substance  
Note: No deaths

Skin irritation : Species: Rabbit  
Classification: non-irritant  
Method: OECD Test Guideline 404  
Test substance: anhydrous substance

Eye irritation : Species: Rabbit  
Result: slight irritation  
Method: OECD Test Guideline 405  
Test substance: anhydrous substance

Sensitisation : Maximisation Test  
Species: Guinea pig  
Classification: non-sensitizing  
Test substance: anhydrous substance  
Method: OECD Test Guideline 406

Genotoxicity in vitro : Test Method: In vitro gene mutation study in mammalian cells  
Cell type: Mouse lymphoma cells  
Metabolic activation: with and without metabolic activation  
Result: negative  
Method: OECD Test Guideline 476

: Test Method: Ames test  
Metabolic activation: with and without metabolic activation  
Result: negative  
Method: OECD Test Guideline 471

Aspiration toxicity : Not applicable

Teratogenicity : Species: Rat Application Route: Oral

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NOAEL: >40 mg/kg bw/d  
NOAEL: >40 mg/kg bw/d  
Method: OECD Test Guideline 414

**12. ECOLOGICAL INFORMATION****Toxicity**

Toxicity to fish : semi-static test  
LC50: 610 mg/l  
Exposure time: 96 h  
Species: Pimephales promelas (fathead minnow)  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : LC50: 1,680 mg/l  
Exposure time: 48 h  
Species: Daphnia (water flea)  
Method: OECD Test Guideline 202

Toxicity to algae : Note: no data available

Toxicity to bacteria : Respiration inhibition  
EC50: 820 mg/l  
Exposure time: 3 h  
Species: activated sludge  
Test substance: REACH dossier "read-across"  
Method: OECD 209

**Persistence and degradability**

Biodegradability : Note: The methods for determining biodegradability are not applicable to inorganic substances.

**13. DISPOSAL CONSIDERATIONS**

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Disposal methods : In accordance with local and national regulations.

**14. TRANSPORT INFORMATION****ADR**

Not dangerous goods

**IATA**

Not dangerous goods

**IMDG**

Not dangerous goods

**RID**

Not dangerous goods

**15. REGULATORY INFORMATION****National regulatory information**

Substances Subject to be :

Notified Names Threshold Concentration: 1 % wt 603  
JP MSDSD

Fire Service Law : Not relevant

Japan. ISHL Hazardous : Listed  
Substances Labeling Sodium molybdate-2-hydrate 10102-40-6  
Requirements (ISHL Art. 57,  
Enforcement Order Art. 18,  
Enforcement Rule Art. 30 &  
31, as amended through 6  
April 2018)Japan. SDS and Risk : Listed  
Assessment Requirements Sodium molybdate-2-hydrate 10102-40-6  
(ISHL Art. 57-2 and 57-3,  
Enforcement Order Art. 18-2,  
Enforcement Rule Art. 34-2  
and 34-2-2), as amendedPoisonous and Deleterious : Not relevant  
Substances Control LawAct on Confirmation, etc. of : Class I Designated Chemical Substances  
Release Amounts of Specific 453



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Chemical Substances in the  
Environment and Promotion  
of Improvements to the  
Management Thereof

Sodium molybdate-2-hydrate 10102-40-6

**Other international regulations****Notification status**

US. Toxic Substances  
Control Act : On TSCA 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. Existing Chemicals  
Inventory (KECI) : 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  
(IECSC) : 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

**16. OTHER INFORMATION**

	<b>HMIS III</b>	<b>NFPA</b>
Health hazard	: 1	1
Flammability	: 1	1
Physical Hazard	: 0	

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Instability : 0

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.

**Further information**

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.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group