Sodium molybdate dihydrate

331058-500G

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 : $MoNa_2O_4 \cdot 2H_2O$

Chemical nature : Substance

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

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 (CO2)
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.

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.

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/cm3 at 20 °C

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/m3

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

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: RatApplication Route: Oral

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

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 JP MSDSD	:	Threshold Concentration: 1 % wt 603
Fire Service Law	:	Not relevant
Japan. ISHL Hazardous Substances Labeling Requirements (ISHL Art. 57, Enforcement Order Art. 18, Enforcement Rule Art. 30 & 31, as amended through 6 April 2018)	:	Listed Sodium molybdate-2-hydrate 10102-40-6
Japan. SDS and Risk Assessment Requirements (ISHL Art. 57-2 and 57-3, Enforcement Order Art. 18-2, Enforcement Rule Art. 34-2 and 34-2-2), as amended	:	Listed Sodium molybdate-2-hydrate 10102-40-6
Poisonous and Deleterious Substances Control Law	:	Not relevant
Act on Confirmation, etc. of Release Amounts of Specific	:	Class I Designated Chemical Substances 453

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

		HMIS III	NFPA
Health hazard	:	1	1
Flammability	:	1	1
Physical Hazard	:	0	

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.
Previous Issue Date: 09/29/2017
Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group