



Material Safety Data Sheet
Sodium molybdate(VI) dihydrate

MSDS# 02027

Section 1 - Chemical Product and Company Identification

MSDS Name: Sodium molybdate(VI) dihydrate
Catalog Numbers: AC206370000, AC206370050, AC206371000, AC206375000
Synonyms: Disodium molybdate dihydrate; Sodium molybdate dihydrate.

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

Company Identification: (USA) Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

Risk Phrases:

CAS#: 10102-40-6
Chemical Name: Sodium molybdate dihydrate
%: 99+
EINECS#: unlisted
Hazard Symbols:

Text for R-phrases: see Section 16

Hazard Symbols: None listed
Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! The toxicological properties of this material have not been fully investigated. May cause eye, skin, and respiratory tract irritation. Target Organs: Blood, kidneys, central nervous system, liver.

Potential Health Effects

Eye: May cause eye irritation.
Skin: May cause skin irritation. May be harmful if absorbed through the skin.
Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.
Inhalation: May cause respiratory tract irritation. May be harmful if inhaled.
Chronic: May cause liver and kidney damage. Adverse reproductive effects have been reported in animals. Laboratory experiments have resulted in mutagenic effects. Chronic exposure may cause blood effects. Exposure to large doses may cause central nervous system depression.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

Skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion: Do not induce vomiting. Get medical aid if irritation or symptoms occur.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Not available

Lower: Not available

Explosion Limits: Not available

Upper: Not available

NFPA Rating: health: 1; flammability: 1; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Use only in a chemical fume hood.

Storage: Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Sodium molybdate	0.5 mg/m3 TWA (respirable fraction, as Mo) (listed under Molybdenum soluble compounds).	1000 mg/m3 IDLH (as Mo) (listed under Molybdenum soluble compounds).	5 mg/m3 TWA (as Mo) (listed under Molybdenum soluble compounds).
Sodium molybdate dihydrate	0.5 mg/m3 TWA (respirable fraction, as Mo) (listed under Molybdenum soluble compounds).	1000 mg/m3 IDLH (as Mo) (listed under Molybdenum soluble compounds).	5 mg/m3 TWA (as Mo) (listed under Molybdenum soluble compounds).

OSHA Vacated PELs: Sodium molybdate: 5 mg/m3 TWA (as Mo) (listed under Molybdenum soluble compounds) Sodium molybdate dihydrate: 5 mg/m3 TWA (as Mo) (listed under Molybdenum soluble compounds)

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

- Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
- Skin: Wear appropriate protective gloves to prevent skin exposure.
- Clothing: Wear appropriate protective clothing to prevent skin exposure.
- Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Crystalline powder

Color: white

Odor: none reported

pH: 9 - 10 (5% aq.sol.)

Vapor Pressure: Not applicable.

Vapor Density: Not available

Evaporation Rate: Not applicable.

Viscosity: Not applicable.

Boiling Point: Not applicable.

Freezing/Melting Point: Not available

Decomposition Temperature: Not available

Solubility in water: 56 g/100mL

Specific Gravity/Density: 3.280

Molecular Formula: $\text{MoNa}_2\text{O}_4 \cdot 2\text{H}_2\text{O}$

Molecular Weight: 241.95

Section 10 - Stability and Reactivity

- Chemical Stability: Stable under normal temperatures and pressures.
- Conditions to Avoid: Incompatible materials, dust generation, excess heat.
- Incompatibilities with Other Materials: Strong oxidizing agents.
- Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, sodium oxide.
- Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

- RTECS#: CAS# 7631-95-0: QA5075000
CAS# 10102-40-6: QA5085000
- RTECS:
CAS# 7631-95-0: Inhalation, rat: $\text{LC}_{50} = >2080 \text{ mg/m}^3/4\text{H}$;
Oral, rat: $\text{LD}_{50} = 4 \text{ gm/kg}$;
- LD50/LC50: Oral, rat: $\text{LD}_{50} = 0.25 \text{ gm/kg}$;
- RTECS:
CAS# 10102-40-6:
- Carcinogenicity: Sodium molybdate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Sodium molybdate dihydrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
- Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

- Other: Do not empty into drains.

Section 13 - Disposal Considerations

- Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Please contact Fisher Scientific for shipping information

Hazard Class:

UN Number:

Packing Group:

Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 7631-95-0: 1

CAS# 10102-40-6: 1

Canada

CAS# 7631-95-0 is listed on Canada's DSL List

Canadian WHMIS Classifications: D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 7631-95-0 is listed on Canada's Ingredient Disclosure List

CAS# 10102-40-6 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 7631-95-0 is listed on the TSCA Inventory.

CAS# 10102-40-6 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the Inventory (40CFR720.3(u)(2)).

Section 16 - Other Information

MSDS Creation Date: 4/05/1997

Revision #8 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
