

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product Identifier:

Product Name: Sodium Molybdate
CAS Number: 7361-95-0
EINECS Number: 231-551-7
REACH Registration Number: 01-2119489495-21-XXXX

Relevant identified uses of the substance or mixture and uses advised against:

Identified uses: As Micronutrients in manufacture and use of fertilizers; Corrosion Inhibitor; Manufacture of pigments; Industrial Detergent for metal surface treatment; Cleaning & Maintenance material; Use as coolant/anti-freeze/ heat transfer fluid; Metal working fluids; Industrial formulation & use of lubrication additives, lubricants and greases; Manufacture of enamels frits, ceramics; Manufacture & Use of Water Treatments Chemicals, inc. water softener; Polymer preparations & compounds; Industrial chemical products such as pH regulator, flocculants, precipitants, neutralization agents; Extraction agents; Photo chemicals; Manufacture & Use of Catalysts, inc. Regeneration & Recycling.

Sector of use:

SU1 Agriculture, forestry, fishery
SU2a Mining, (without offshore industries)
SU2b Offshore industries
SU5 Manufacture of textiles, leather, fur
SU6b Manufacture of pulp, paper and paper products
SU8 Manufacture of bulk, large scale chemicals (including petroleum products)
SU9 Manufacture of fine chemicals
SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
SU11 Manufacture of rubber products
SU12 Manufacture of plastics products, including compounding and conversion
SU13 Manufacture of other non-metallic mineral products, e.g. plasters, cement
SU14 Manufacture of basic metals, including alloys
SU15 Manufacture of fabricated metal products, except machinery and equipment
SU17 General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment

Product category:

PC2 Adsorbents
PC3 Air care products
PC4 Anti-Freeze and de-icing products
PC8 Biocidal products (e.g. Disinfectants, pest control)
PC9a Coatings and paints, thinners, paint removers
PC9b Fillers, putties, plasters, modelling clay
PC12 Fertilisers
PC14 Metal surface treatment products, including galvanic and electroplating products

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PC15 Non-metal-surface treatment products
PC16 Heat transfer fluids
PC17 Hydraulic fluids
PC19 Intermediate
PC20 Products such as pH-regulators, flocculants, precipitants, neutralisation agents
PC21 Laboratory chemicals
PC23 Leather tanning, dye, finishing, impregnation and care products
PC24 Lubricants, greases, release products
PC25 Metal working fluids
PC27 Plant protection products
PC30 Photo-chemicals
PC32 Polymer preparations and compounds
PC34 Textile dyes, finishing and impregnating products; including bleaches and other processing aids
PC35 Washing and cleaning products (including solvent based products)
PC36 Water softeners
PC37 Water treatment chemicals
PC39 Cosmetics, personal care products
PC40 Extraction agents
PC 0: Other: Pigments to glazing materials, enamels and glass.
PC 0: Other: Pigments to paint and printing inks.
PC 0: Other: Pigments pastes
PC 0: Other: Nutrient
PC 0: Other: catalyst

Article category: AC 02: Other (intended to be released)

Application of the substance / the mixture: The substance is used as a source of molybdenum.

Uses advised against: Processes involving the use of incompatible substances - refer to section 10.
Processes involving extreme heat use advised against.

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification 1272/2008 (CLP): The substance is not classified according to the CLP regulation.

Label elements

Labelling according to Regulation (EC) No 1272/2008: Void

Hazard pictograms: Void

Signal word: Void

Hazard statements: Void

Other hazards:

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterisation: Substances

CAS No. Description: 7631-95-0 Sodium Molybdate

Identification number(s): EC number: 231-551-7

4. FIRST AID MEASURES

Description of first aid measures:

General information: No special measures required

Inhalation: Supply fresh air; consult doctor in case of complaints.

Skin contact: Immediately rinse with water. If skin irritation continues, consult a doctor.

Eye contact: Check for and remove any contact lenses. Rinse opened eye for several minutes under running water. Then consult a doctor.

Ingestion: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Most important symptoms and effects, both acute and delayed:

No further relevant information available.

Information for doctor: Treat symptomatically and supportively.

Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

5. FIRE-FIGHTING MEASURES

Extinguishing Media:

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

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Special hazards arising from the substance or mixture: During heating or in case of fire poisonous gases are produced.

Advice for fire-fighters: Wear self-contained respiratory protective device. Wear fully protective suit. Do not inhale explosion gases or combustion gases.

Additional information: Non-combustible solid. Freely soluble in water.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Avoid formation of dust. Ensure adequate ventilation

Environmental precautions: Do not allow to enter sewers/ surface or ground water. Do not allow to penetrate the ground/soil.

Methods and material for containment and cleaning up:

Pick up mechanically. Send for recovery or disposal in suitable receptacles.

Reference to other sections: No dangerous substances are released.

7. HANDLING AND STORAGE

Precautions for safe handling: Prevent formation of dust. Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection: The product is not flammable.

Conditions for safe storage, including any incompatibilities:

Storage:

Requirements to be met by storerooms and receptacles: Prevent any seepage into the ground.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions: Store in cool, dry conditions in well-sealed receptacles.

Specific end use(s): No further relevant information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Additional information about design of technical facilities: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace: Not required.

DNELs: WORKERS

Long-term exposure - systemic effects

Inhalation DN(M)EL

DNEL (Derived No Effect Level): 11.17 mg/m³

GENERAL POPULATION

Long-term exposure - systemic effects

Inhalation DN(M)EL

DNEL (Derived No Effect Level): 3.33 mg/m³

Oral DN(M)EL

DNEL (Derived No Effect Level): 4.85 mg/kg bw/day

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PNECs:

PNEC aqua (freshwater):	12.7 mg/L
PNEC aqua (marine water):	1.91 mg/L
PNEC STP:	21.7 mg/L
PNEC sediment (freshwater):	22600 mg/kg sediment dw
PNEC sediment (marine water):	1984 mg/kg sediment dw
PNEC soil:	39 mg/kg soil dw

Additional information: The lists valid during the making were used as basis.

Exposure controls:

Personal protective equipment: Select PPE appropriate for the operations taking place taking into account the product properties.

General protective and hygienic measures: Wash hands before breaks and at the end of work. Avoid close or long term contact with the skin. Avoid contact with the eyes. Do not eat, drink, smoke or sniff while working. Do not breathe dust.

Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If respiratory protection is required, institute a complete respiratory protection program including selection, fit, testing, training, maintenance and inspection.

Hand protection: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Safety glasses

Body protection: Protective work clothing. Body protection must be chosen depending on product properties, activity and possible exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Appearance:	Solid
Colour:	White
Odour:	Characteristic
Odour threshold:	Not determined
pH value at 20°C:	9.0
Melting point/range:	687°C
Boiling point/range:	Undetermined
Flash point:	Not applicable
Flammability (solid/gaseous):	Product is not flammable
Decomposition temperature:	Not determined
Self-igniting:	Not determined

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Danger of explosion: Product does not present an explosion hazard

Explosion limits:

Lower: Not determined

Upper: Not determined

Vapour pressure: Not applicable

Density at 20°C: 2.6 g/cm³

Relative density: Not determined

Vapour density: Not applicable

Evaporation rate: Not applicable

Solubility/miscibility with water at 20°C: 650 g/l

Partition co-efficient (n-octanol/water): Not determined

Viscosity, dynamic: Not applicable

Viscosity, kinematic: Not applicable

Other information: No further relevant information

10. STABILITY AND REACTIVITY

Reactivity: No further relevant information

Chemical stability:

Thermal decomposition/conditions to be avoided: No decomposition if used and stored according to specifications. To avoid thermal decomposition do not overheat. The substance decomposes on heating producing toxic fumes including fumes of sodium oxide.

Possibility of hazardous reactions: Reacts violently with halogens causing fire and explosion hazard. Risk of fire and explosion on contact with molten magnesium.

Conditions to avoid: No further relevant information available.

Incompatible materials: Strong oxidising agents. Substances specifically listed in section 10.3 as incompatible.

Hazardous decomposition products: Metal oxide fume

Additional information: Non-combustible solid. Freely soluble in water.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:

Acute toxicity: Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

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Oral LD50 >2000 mg/kg (rat)

Dermal LD50 >2000 mg/kg (rat)

Inhalative LC50/4 h >3.92 mg/l (rat)

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Primary irritant effect:

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Additional toxicological information:

ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Toxicity:

Aquatic toxicity: No further relevant information

Persistence and degradability: No further relevant information

Bio accumulative potential: Product is not expected to bio accumulate.

Mobility in soil: No further relevant information

Additional ecological information:

General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water, do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects: No further relevant information

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Recommendation:

Recommended Hierarchy of Controls: Minimise waste; Reuse if not contaminated; Recycle, if possible; or safe disposal (if all else fails). Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

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Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

European waste catalogue: Waste key numbers in accordance with the European Waste Catalogue (EWC) are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

14. TRANSPORT INFORMATION

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

No further relevant information.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Abbreviations and acronyms:

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative

Source of key data used to compile the data sheet: Supplier information

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Legal disclaimer:

The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.