



Be Right™

SAFETY DATA SHEET

Issue Date 29-Jun-2016

Revision Date 21-Dec-2017

Version 5.1

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1. IDENTIFICATION

Product identifier

Product Name MolyVer® 2 Molybdenum Reagent

Other means of identification

Product Code(s) 2604399

Safety data sheet number M00064

Recommended use of the chemical and restrictions on use

Recommended Use Determination of molybdenum.

Uses advised against None.

Restrictions on use None.

Details of the supplier of the safety data sheet

Manufacturer Address

Hach Company P.O.Box 389 Loveland,
CO 80539 USA +1(970) 669-3050

Emergency telephone number

+1(303) 623-5716 - 24 Hour Service +1(515)232-2533 - 8am - 4pm CST

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|--|-------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2A |
| Respiratory sensitization | Category 1 |
| Skin sensitization | Category 1 |
| Mutagenicity | |
| Carcinogenicity | |
| Reproductive toxicity | |
| Specific target organ toxicity (single exposure) | Category 3 |
| Specific target organ toxicity (repeated exposure) | |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word - Danger



Hazard statements

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation

Precautionary statements

P362 - Take off contaminated clothing and wash before reuse
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/attention
P285 - In case of inadequate ventilation wear respiratory protection
P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
P272 - Contaminated work clothing should not be allowed out of the workplace
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P363 - Wash contaminated clothing before reuse
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P271 - Use only outdoors or in a well-ventilated area
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/ container to an approved waste disposal plant

Other Information

May be harmful if swallowed
Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Percent ranges are used where confidential product information is applicable.

| Chemical name | CAS No. | Percent Range | HMRIC # |
|----------------------|-----------|---------------|---------|
| Sodium sulfate | 7757-82-6 | 60 - 70% | - |
| Potassium persulfate | 7727-21-1 | 30 - 40% | - |

| | | |
|-----------------------------------|-----------|----------|
| Chemical name | CAS No. | Weight-% |
| Sodium sulfate 7757-82-6 | 7757-82-6 | 66.7 |
| Potassium persulfate 7727-21-1 | 7727-21-1 | 33.3 |

4. FIRST AID MEASURES

Description of first aid measures

| | |
|---|---|
| General advice | Show this safety data sheet to the doctor in attendance. |
| Inhalation | May cause allergic respiratory reaction. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Get immediate medical advice/attention. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area. |
| Skin contact | May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. Wash off immediately with soap and plenty of water for at least 15 minutes. |
| Ingestion | May produce an allergic reaction. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention. |
| Self-protection of the first aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. |

Most important symptoms and effects, both acute and delayed

| | |
|-----------------|--|
| Symptoms | May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Itching. Rashes. Hives. Burning sensation. |
|-----------------|--|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|--|
| Note to physicians | May cause sensitization in susceptible persons. Treat symptomatically. |
|---------------------------|--|

5. FIRE-FIGHTING MEASURES

| | |
|---|---|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable Extinguishing Media | Caution: Use of water spray when fighting fire may be inefficient. |
| Specific hazards arising from the chemical | Product is or contains a sensitizer. May cause sensitization by inhalation and skin contact. May cause sensitization by skin contact. |
| Hazardous combustion products | Sodium oxides. Sulfur oxides. |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. |

6. ACCIDENTAL RELEASE MEASURES

| | |
|--------------------|--|
| U.S. Notice | Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals. |
|--------------------|--|

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Provide extract ventilation to points where emissions occur. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse. Avoid breathing vapors or mists.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|----------------------------|----------|------------|
| Potassium persulfate CAS#: 7727-21-1 | TWA: 0.1 mg/m ³ | NDF | NDF |

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

| | |
|--|---|
| Hand Protection | Wear suitable gloves. Impervious gloves. |
| Eye/face protection | Wear safety glasses with side shields (or goggles). If splashes are likely to occur, wear safety glasses with side-shields. |
| Skin and body protection | Wear suitable protective clothing. Long sleeved clothing. |
| General Hygiene Considerations | Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. |
| Environmental exposure controls | Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water. |
| Thermal hazards | None under normal processing. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | |
|-----------------------|-------------------|
| Physical state | Solid |
| Appearance | powder |
| Color | white |
| Odor | None |
| Odor threshold | No data available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|-----------------------------|-------------------------|
| Molecular weight | No data available | |
| pH | 4.9 | 5% Solution |
| Melting point/freezing point | No data available | |
| Boiling point / boiling range | No data available | |
| Evaporation rate | Not applicable | |
| Vapor pressure | Not applicable | |
| Vapor density (air = 1) | Not applicable | |
| Specific gravity (water = 1 / air = 1) | 2.51 | |
| Partition Coefficient (n-octanol/water) | log K _{ow} ~ -2.38 | |
| Soil Organic Carbon-Water Partition Coefficient | log K _{oc} ~ -1.11 | |
| Autoignition temperature | No data available | |
| Decomposition temperature | No data available | |
| Dynamic viscosity | Not applicable | |
| Kinematic viscosity | Not applicable | |

Solubility(ies)

Water solubility

| <u>Water solubility classification</u> | <u>Water solubility</u> | <u>Water Solubility Temperature</u> |
|--|-------------------------|-------------------------------------|
| Soluble | > 1000 mg/L | 25 °C / 77 °F |

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Solubility in other solvents

| Chemical Name | Solubility classification | Solubility | Solubility Temperature |
|---------------|---------------------------|-------------|------------------------|
| Acid | Soluble | > 1000 mg/L | 25 °C / 77 °F |

Other Information

Metal Corrosivity

Steel Corrosion Rate Not applicable
Aluminum Corrosion Rate Not applicable

Volatile Organic Compounds (VOC) Content

Not applicable

| Chemical name | CAS No. | Volatile organic compounds (VOC) content | CAA (Clean Air Act) |
|----------------------|-----------|--|---------------------|
| Sodium sulfate | 7757-82-6 | No data available | - |
| Potassium persulfate | 7727-21-1 | No data available | - |

Explosive properties

Upper explosion limit No data available
Lower explosion limit No data available

Flammable properties

Flash point Not applicable
Method No information available

Flammability Limit in Air

Upper flammability limit: No data available
Lower flammability limit: No data available

Oxidizing properties

Test method If available, see data below.
Department of Transportation (DOT) Oxidizer Test
Sample/Cellulose mean burn time 1:1 Sample/Cellulose mean burn time = 142.8 seconds
Reference/Cellulose mean burn time 3:7 Potassium bromate/Cellulose mean burn time = 91.8 seconds

Bulk density No data available

Particle Size No information available

Particle Size Distribution No information available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None
Sensitivity to Static Discharge None.

Possibility of Hazardous Reactions

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization

None under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

Hazardous Decomposition Products

Sulfur oxides. Sodium monoxide.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Inhalation May cause sensitization in susceptible persons. May cause irritation of respiratory tract.

Eye contact Irritating to eyes. Causes serious eye irritation.

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May cause sensitization by skin contact. Causes skin irritation.

Ingestion May cause additional affects as listed under "Inhalation". Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/ or wheezing. Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes.

Aggravated Medical Conditions Skin disorders. Eye disorders. Respiratory disorders. Allergies.

Toxicologically synergistic products None known.

Toxicokinetics, metabolism and distribution No information available.

Product Acute Toxicity Data

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

Acute Toxicity Estimations (ATE)

The following values are calculated based on chapter 3.1 of the GHS document

| | |
|--------------------------------------|--------------------------|
| ATEmix (oral) | 2,408.00 mg/kg |
| ATEmix (dermal) | No information available |
| ATEmix (inhalation-dust/mist) | No information available |
| ATEmix (inhalation-vapor) | No information available |
| ATEmix (inhalation-gas) | No information available |

Ingredient Acute Toxicity Data

Oral Exposure Route

If available, see data below

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--|------------------------|---------------|---------------|-----------------------|--|
| Potassium persulfate (30 - 40%) CAS#: 7727-21-1 | Rat LD ₅₀ | 802 mg/kg | None reported | None reported | IUCLID (The International Uniform Chemical Information Database) |
| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
| Sodium sulfate (60 - 70%) CAS#: 7757-82-6 | Mouse LD ₅₀ | 5989 mg/kg | None reported | None reported | IUCLID (The International Uniform Chemical Information Database) |

Dermal Exposure Route

If available, see data below

Inhalation (Dust/Mist) Exposure Route

If available, see data below

Inhalation (Vapor) Exposure Route

If available, see data below

Inhalation (Gas) Exposure Route

If available, see data below

Product Specific Target Organ Toxicity Single Exposure Data

Oral Exposure Route

No data available

Dermal Exposure Route

No data available

Inhalation (Dust/Mist) Exposure Route

No data available

Inhalation (Vapor) Exposure Route

No data available

Inhalation (Gas) Exposure Route

No data available

Ingredient Specific Target Organ Toxicity Single Exposure Data

Oral Exposure Route

If available, see data below

Dermal Exposure Route

If available, see data below

Inhalation (Dust/Mist) Exposure Route

If available, see data below

Inhalation (Vapor) Exposure Route

If available, see data below

Inhalation (Gas) Exposure Route

If available, see data below

Aspiration toxicity

If available, see data below

Kinematic viscosity

Not applicable

Product Skin Corrosion/Irritation Data

No data available.

Ingredient Skin Corrosion/Irritation Data

If available, see data below

| Chemical name | Test method | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--|----------------------|---------|---------------|---------------|-------------------------------------|--|
| Sodium sulfate (60 - 70%) CAS#: 7757-82-6 | Standard Draize Test | Rabbit | 500 mg | 4 hours | Not corrosive or irritating to skin | ECHA (The European Chemicals Agency) |

Product Serious Eye Damage/Eye Irritation Data

No data available.

Ingredient Eye Damage/Eye Irritation Data

If available, see data below

| Chemical name | Test method | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--|----------------------|---------|---------------|---------------|-------------------------------------|--|
| Sodium sulfate (60 - 70%) CAS#: 7757-82-6 | Standard Draize Test | Rabbit | 90 mg | 24 hours | Not corrosive or irritating to eyes | ECHA (The European Chemicals Agency) |

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Product Sensitization Data

Skin Sensitization Exposure Route No data available.
Respiratory Sensitization Exposure Route No data available.

Ingredient Sensitization Data

Skin Sensitization Exposure Route If available, see data below.

| Chemical name | Test method | Species | Results | Key literature references and sources for data |
|---|---|------------|---------------------------------------|--|
| Sodium sulfate (60 - 70%) CAS#: 7757-82-6 | OECD Test No. 406: Skin Sensitization | Guinea pig | Not confirmed to be a skin sensitizer | HSDB (Hazardous Substances Data Bank) |

Respiratory Sensitization Exposure Route If available, see data below.

Chronic Toxicity Information

Product Specific Target Organ Toxicity Repeat Dose Data

Oral Exposure Route No data available.
Dermal Exposure Route No data available.
Inhalation (Dust/Mist) Exposure Route No data available.
Inhalation (Vapor) Exposure Route No data available.
Inhalation (Gas) Exposure Route No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Oral Exposure Route If available, see data below
Dermal Exposure Route If available, see data below
Inhalation (Dust/Mist) Exposure Route If available, see data below
Inhalation (Vapor) Exposure Route If available, see data below
Inhalation (Gas) Exposure Route If available, see data below

Product Carcinogenicity Data

Oral Exposure Route No data available
Dermal Exposure Route No data available
Inhalation (Dust/Mist) Exposure Route No data available
Inhalation (Vapor) Exposure Route No data available
Inhalation (Gas) Exposure Route No data available

Ingredient Carcinogenicity Data

| Chemical name | CAS No. | ACGIH | IARC | NTP | OSHA |
|----------------------|-----------|-------|------|-----|------|
| Sodium sulfate | 7757-82-6 | - | - | - | - |
| Potassium persulfate | 7727-21-1 | - | - | - | - |

Legend

| | |
|---|----------------|
| ACGIH (American Conference of Governmental Industrial Hygienists) | Does not apply |
| IARC (International Agency for Research on Cancer) | Does not apply |
| NTP (National Toxicology Program) | Does not apply |
| OSHA (Occupational Safety and Health Administration of the US Department of Labor) | Does not apply |

Oral Exposure Route If available, see data below
Dermal Exposure Route If available, see data below
Inhalation (Dust/Mist) Exposure Route If available, see data below
Inhalation (Vapor) Exposure Route If available, see data below
Inhalation (Gas) Exposure Route If available, see data below

Product Germ Cell Mutagenicity *in vitro* Data

No data available.

Ingredient Germ Cell Mutagenicity *in vitro* Data

No data available

Product Germ Cell Mutagenicity *in vivo* Data

Oral Exposure Route No data available
 Dermal Exposure Route No data available
 Inhalation (Dust/Mist) Exposure Route No data available
 Inhalation (Vapor) Exposure Route No data available
 Inhalation (Gas) Exposure Route No data available

Ingredient Germ Cell Mutagenicity *in vivo* Data

Oral Exposure Route If available, see data below
 Dermal Exposure Route If available, see data below
 Inhalation (Dust/Mist) Exposure Route If available, see data below
 Inhalation (Vapor) Exposure Route If available, see data below
 Inhalation (Gas) Exposure Route If available, see data below

Product Reproductive Toxicity Data

Oral Exposure Route No data available
 Dermal Exposure Route No data available
 Inhalation (Dust/Mist) Exposure Route No data available
 Inhalation (Vapor) Exposure Route No data available
 Inhalation (Gas) Exposure Route No data available

Ingredient Reproductive Toxicity Data

Oral Exposure Route If available, see data below

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---|---------------------------|---------------|---------------|---|--|
| Sodium sulfate (60 - 70%) CAS#: 7757-82-6 | Mouse TD _{Lo} | 14000 mg/kg | 4 days | Effects on Newborn Other neonatal measures or effects | RTECS (Registry of Toxic Effects of Chemical Substances) |

Inhalation (Dust/Mist) Exposure Route If available, see data below
 Inhalation (Vapor) Exposure Route If available, see data below
 Inhalation (Gas) Exposure Route If available, see data below

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product Ecological Data

Aquatic toxicity

Fish No data available
 Crustacea No data available
 Algae No data available

Ingredient Ecological Data

Aquatic toxicity

Fish If available, see ingredient data below

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|---|---------------|---------------|------------------|---------------|--|
| Sodium sulfate (60 - 70%) CAS#: 7757-82-6 | 96 hours | None reported | LC ₅₀ | 56 mg/L | IUCLID (The International Uniform Chemical Information Database) |

Crustacea If available, see ingredient data below

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|------------------------------|---------------|----------------------|------------------|---------------|--|
| Sodium sulfate (60 - 70%) | 48 Hours | <i>Daphnia magna</i> | EC ₅₀ | 3150 mg/L | IUCLID (The International Uniform Chemical Information Database) |

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| | | | | | |
|---|----------|----------------------|------------------|---------|---|
| CAS#: 7757-82-6 | | | | | Database) |
| Potassium persulfate (30 - 40%) CAS#: 7727-21-1 | 48 Hours | <i>Daphnia magna</i> | EC ₅₀ | 92 mg/L | EPA (United States Environmental Protection Agency) |

Algae No data available

Other Information

Persistence and degradability

Product Biodegradability Data

No data available.

Ingredient Biodegradability Data

| Chemical name | Test method | Biodegradation | Exposure time | Results |
|---|-------------------------------------|----------------|---------------|-----------------------|
| Potassium persulfate (30 - 40%) CAS#: 7727-21-1 | Degrades through hydrolyse reaction | None reported | None reported | Readily biodegradable |

Bioaccumulation

Product Bioaccumulation Data

No data available.

Partition Coefficient (n-octanol/water)

log K_{ow} ~ -2.38

Ingredient Bioaccumulation Data

| Chemical name | Test method | Exposure time | Species | Bioconcentration factor (BCF) | Results |
|---|--|---------------|---------------|-------------------------------|--|
| Potassium persulfate (30 - 40%) CAS#: 7727-21-1 | Estimation through BCFBAF v3.01 part of the Estimation Programs Interface (EPI) Suite™ | None reported | None reported | log BCF = 0.50 | Does not have the potential to bioaccumulate |

Mobility

Soil Organic Carbon-Water Partition Coefficient

log K_{oc} ~ -1.11

Water solubility

| Water solubility classification | Water solubility | Water Solubility Temperature |
|---------------------------------|------------------|------------------------------|
| Soluble | > 1000 mg/L | 25 °C / 77 °F |

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

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Contaminated packaging Do not reuse empty containers.

Special instructions for disposal If permitted by regulation. Dilute material with excess water making a weaker than 5% solution. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Open cold water tap completely, slowly pour the material to the drain. Allow cold water to run for 5 minutes to completely flush the system. Dispose of material in an E.P.A. approved hazardous waste facility.

14. TRANSPORT INFORMATION

U.S. DOT Not regulated
TDG Not regulated
IATA Not regulated
IMDG Not regulated
Note: No special precautions necessary.

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies. If the item is part of a reagent set or kit the classification would change to the following: UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

National Inventories

TSCA Complies
DSL/NDSL Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories

EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies
TCSI Complies
AICS Complies
NZIoC Complies

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
TCSI - Taiwan Chemical Substances Inventory
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

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SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

| | |
|--|-----|
| Acute health hazard | Yes |
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|-----------------------------------|-------------------|----------------------|---------------------|
| Sodium sulfate 7757-82-6 | - | X | X |
| Potassium persulfate 7727-21-1 | X | X | X |

U.S. EPA Label Information

| Chemical name | FIFRA | FDA |
|----------------------|--------------|-----------------|
| Sodium sulfate | - | 21 CFR 186.1797 |

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Special Comments

None

Additional information

Global Automotive Declarable Substance List (GADSL)

Not applicable

NFPA and HMIS Classifications

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| | | | | |
|-------------|---------------------------|-------------------------|-----------------------------|--|
| NFPA | Health hazards - 2 | Flammability - 0 | Instability - 0 | Physical and Chemical Properties - |
| HMIS | Health hazards - 2 | Flammability - 0 | Physical Hazards - 0 | Personal protection - X - See section 8 for more information |

Key or legend to abbreviations and acronyms used in the safety data sheet

NIOSH IDLH *Immediately Dangerous to Life or Health*
 ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)
 NDF *no data*

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | | |
|------|---------------------------------|---------|---|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| MAC | Maximum Allowable Concentration | Ceiling | Ceiling Limit Value |
| X | Listed | Vacated | These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations. |
| SKN* | Skin designation | SKN+ | Skin sensitization |
| RSP+ | Respiratory sensitization | ** | Hazard Designation |
| C | Carcinogen | R | Reproductive toxicant |
| M | mutagen | | |

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Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

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End of Safety Data Sheet