

SAFETY DATA SHEET

Preparation Date: 12/14/2015

Revision Date: 9/18/2018

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: M-218
Product Name: METHYL ORANGE, 0.1 PERCENT (W/V) AQUEOUS INDICATOR SOLUTION, (U.S.P. TEST SOLUTION)

Other means of identification

Synonyms: No information available
CAS #: Mixture
RTECS # Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not classified

Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

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3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight % |
|---------------|-----------|----------|
| Water | 7732-18-5 | 99.9 |
| Methyl Orange | 547-58-0 | 0.1 |

4. FIRST AID MEASURES

First aid measures

- General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.
- Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops.
- Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
- Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

- Symptoms** May cause eye/skin irritation
May cause gastrointestinal upset or indigestion

Indication of any immediate medical attention and special treatment needed

- Notes to Physician:** Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

- Suitable Extinguishing Media:** The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

- Unsuitable Extinguishing Media:** No information available.

Specific hazards arising from the chemical

- Hazardous Combustion Products:** No information available.

- Specific hazards:** No information available.

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Special Protective Actions for Firefighters

Specific Methods: No information available.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

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

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Use only in area provided with appropriate exhaust ventilation. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors or spray mist. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

| Components | CAS-No. | OSHA | NIOSH | ACGIH | AIHA WEEL |
|---------------|-----------|------|-------|-------|-----------|
| Water | 7732-18-5 | None | None | None | None |
| Methyl Orange | 547-58-0 | None | None | None | None |

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Canada

| Components | CAS-No. | Canada - Alberta | Canada - British Columbia | Canada - Ontario | Canada - Quebec |
|---------------|-----------|------------------|---------------------------|------------------|-----------------|
| Water | 7732-18-5 | None | None | None | None |
| Methyl Orange | 547-58-0 | None | None | None | None |

Australia and Mexico

| Components | CAS-No. | Australia | Mexico |
|---------------|-----------|-----------|--------|
| Water | 7732-18-5 | None | None |
| Methyl Orange | 547-58-0 | None | None |

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:

Goggles or Safety glasses with side-shields.

Skin and body protection:

Long sleeved clothing
Chemical resistant apron
Gloves

Respiratory protection:

Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Liquid

Appearance:

No information available.

Color:

Orange.

Odor:

Odorless.

Taste

No information available.

Formula:

No information available

Molecular/Formula weight (g/mole):

No information available

Flammability:

No information available

Flashpoint (°C/°F):

No information available.

Flash Point Tested according to:

Not available

Autoignition Temperature (°C/°F):

No information available

Lower Explosion Limit (%):

No information available

Upper Explosion Limit (%):

No information available

Melting point/range(°C/°F):

No information available

Decomposition temperature(°C/°F):

No information available

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Boiling point/range(°C/°F):

No information available

Bulk density:

No information available

Density (g/cm3):

No information available

Specific gravity:

No information available

pH:

No information available

Vapor pressure @ 20°C (kPa):

No information available

Evaporation rate:

No information available

Vapor density:

No information available

VOC content (g/L):

No information available

Odor threshold (ppm):

No information available

Partition coefficient**(n-octanol/water):**

No information available

Viscosity:

No information available

Miscibility:

No information available

Solubility:

Freely soluble in water

10. STABILITY AND REACTIVITY**Reactivity**

Reactive with strong oxidizing agents

Chemical stability**Stability:**

Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur**Conditions to avoid:**

Incompatible materials.

Incompatible Materials:

Strong oxidizing agents

Hazardous decomposition products:

No information available.

Other Information**Corrosivity:**

No information available

Special Remarks on Corrosivity: No information available**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Principal Routes of Exposure:**

Skin. Ingestion. Eyes.

Numerical measures of toxicity**Acute Toxicity**

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

ATEmix (oral)

60024 mg/kg

Component Information

Water

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| | |
|---------|-----------|
| CAS-No. | 7732-18-5 |
|---------|-----------|

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

| | |
|---------------|----------|
| Methyl Orange | |
| CAS-No. | 547-58-0 |

LD50/oral/rat = 60 mg/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation. May cause mild to moderate skin irritation.
Eye Contact: May cause eye irritation.
Inhalation May cause irritation of respiratory tract.
Ingestion Ingestion of very large quantities may cause gastrointestinal upset or indigestion.
Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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Chronic Toxicity No information available.

Sensitization: No information available.

Mutagenic Effects: For Methyl Orange:
Mutations in microorganisms
Experiments with bacteria and/or yeast have shown mutagenic effects

Carcinogenic effects: Not considered carcinogenic.

| Components | CAS-No. | IARC | ACGIH - Carcinogens | NTP | OSHA HCS - Carcinogens | Australia - Notifiable Carcinogenic Substances | Australia - Prohibited Carcinogenic Substances |
|---------------|-----------|------------|---------------------|------------|------------------------|--|--|
| Water | 7732-18-5 | Not listed | Not listed | Not listed | Not listed | Not listed | Not listed |
| Methyl Orange | 547-58-0 | Not listed | Not listed | Not listed | Not listed | Not listed | Not listed |

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organs: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

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Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

| Components | CAS-No. | RCRA - F Series Wastes | RCRA - K Series Wastes | RCRA - P Series Wastes | RCRA - U Series Wastes |
|---------------|-----------|------------------------|------------------------|------------------------|------------------------|
| Water | 7732-18-5 | None | None | None | None |
| Methyl Orange | 547-58-0 | None | None | None | None |

| |
|----------------------------------|
| 14. TRANSPORT INFORMATION |
|----------------------------------|

DOT

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Class: No information available
Packing group: No information available
Emergency Response Guide Number: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: No information available
Symbol(s): No information available
Description: No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant: No information available
Description: No information available

ADR

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available

IMO / IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant: No information available

RID

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

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ICAO

UN-No: Not Regulated
 Proper Shipping Name: No information available
 Hazard Class: No information available
 Subsidiary Risk: No information available
 Packing Group: No information available

IATA

UN-No: Not Regulated
 Proper Shipping Name: No information available
 Hazard Class: No information available
 Subsidiary Risk: No information available
 Packing Group: No information available
 ERG Code: No information available
 Special Provisions: No information available

15. REGULATORY INFORMATION**International Inventories**

| Components | CAS-No. | U.S. TSCA | KOREA KECL | Philippines (PICCS) | Japan ENCS | CHINA | Australia (AICS) | EINECS-No. |
|---------------|-----------|---------------|---------------------|---------------------|---------------------|---------|------------------|----------------------|
| Water | 7732-18-5 | PresentACTIVE | Present KE-35400 | Present | Not present | Present | Present | Present 231-791-2 |
| Methyl Orange | 547-58-0 | PresentACTIVE | Present KE-11174 | Present | Present (5)-4278 | Present | Present | Present 208-925-3 |

U.S. Regulations**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.****Chemicals Known to the State of California to Cause Cancer:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

| Components | CAS-No. | Carcinogen | Developmental Toxicity | Male Reproductive Toxicity | Female Reproductive Toxicity: |
|---------------|-----------|------------|------------------------|----------------------------|-------------------------------|
| Water | 7732-18-5 | Not Listed | Not Listed | Not Listed | Not Listed |
| Methyl Orange | 547-58-0 | Not Listed | Not Listed | Not Listed | Not Listed |

CERCLA/SARA

| Components | CAS-No. | CERCLA - Hazardous Substances and their Reportable Quantities | Section 302 Extremely Hazardous Substances and TPQs | Section 302 Extremely Hazardous Substances and RQs | Section 313 - Chemical Category | Section 313 - Reporting de minimis |
|---------------|-----------|---|---|--|---------------------------------|------------------------------------|
| Water | 7732-18-5 | None | None | None | None | None |
| Methyl Orange | 547-58-0 | None | None | None | None | None |

U.S. TSCA

| Components | CAS-No. | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) -Health and Safety Reporting |
|------------|---------|---|--|
| | | | |

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| | | | |
|---------------|-----------|----------------|----------------|
| Water | 7732-18-5 | Not Applicable | Not Applicable |
| Methyl Orange | 547-58-0 | Not Applicable | Not Applicable |

Canada

WHIMIS 2015 - GHS Classifications

WHIMIS 2015 Hazard Classification Information: Not a dangerous product according to HPR classification criteria.

| | |
|--------------------|--|
| Component | WHIMIS 2015 Hazard Classification |
| Water | Not a dangerous product according to HPR classification criteria |
| 7732-18-5 (99.9) | |
| Methyl Orange | Not a dangerous product according to HPR classification criteria |
| 547-58-0 (0.1) | |

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

| | |
|-------------------|---|
| Components | WHMIS Ingredient Disclosure List - |
| Methyl Orange | 1 % |

Inventory

| | | | |
|---------------|-----------|--------------|---------------|
| Components | CAS-No. | Canada (DSL) | Canada (NDSL) |
| Water | 7732-18-5 | Present | Not Listed |
| Methyl Orange | 547-58-0 | Present | Not Listed |

| | | |
|-------------------|----------------|--|
| Components | CAS-No. | CEPA Schedule I - Toxic Substances |
| Water | 7732-18-5 | Not listed |
| Methyl Orange | 547-58-0 | Not listed |
| Components | CAS-No. | CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting |
| Water | 7732-18-5 | Not listed |
| Methyl Orange | 547-58-0 | Not listed |

EU Classification

EU GHS - SV - CLP 1272/2008

| | | |
|---------------|-----------|-------------------------------|
| Components | CAS-No. | EU GHS - SV - CLP (1272/2008) |
| Water | 7732-18-5 | |
| Methyl Orange | 547-58-0 | |

EU - CLP (1272/2008)

R-phrase(s)

not determined (not applicable)

S -phrase(s)

none

| | | | | |
|---------------|-----------|----------------|-----------------------|----------------|
| Components | CAS-No. | Classification | Concentration Limits: | Safety Phrases |
| Water | 7732-18-5 | | No information | |
| Methyl Orange | 547-58-0 | | No information | |

The product is classified in accordance with Annex VI to Directive 67/548/EEC

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Indication of danger:
Not dangerous

16. OTHER INFORMATION

Preparation Date: 12/14/2015
Revision Date: 9/18/2018
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet