Wako Pure Chemical Industries, Ltd.

# SAFETY DATA SHEET

According to JIS Z 7253:2012

**Revision Date** 03-Jun-2014
**Version** 1

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

| | |
|---|---|
| **Product name** | Methyl Orange |
| **Product code** | 131-02862 |
| CAS No | 547-58-0 |

**Formula** (CH3)2NC6H4N:NC6H4SO3Na

**Manufacturer**
Wako Pure Chemical Industries, Ltd
1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan
Phone: +81 (0)6-6203-3741
Fax: +81 (0)6-6201-5964

**Supplier**
Wako Pure Chemical Industries, Ltd
1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan
Phone: +81 (0)6-6203-3741
Fax: +81 (0)6-6201-5964

**Emergency telephone number** +81-6-6203-3741 / +81-3-3270-8571

**Recommended uses and restrictions on use** For research purposes

## Section 2: HAZARDS IDENTIFICATION

**GHS classification**
**Classification of the substance or mixture**
**Acute toxicity - Oral** Category 3

**Pictograms**

**Signal word** Danger

**Hazard statements**
H301 - Toxic if swallowed

**Precautionary statements-(Prevention)**
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product

**Precautionary statements-(Response)**
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Rinse mouth

**Precautionary statements-(Storage)**
- No

**Precautionary statements-(Disposal)**
- Dispose of contents/container to an approved waste disposal plant

**Others**
**Other hazards** Not available

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Single Substance or Mixture** Substance
**Formula** (CH3)2NC6H4N:NC6H4SO3Na

| Chemical Name | Weight-% | Molecular weight | ENCS | ISHL No. | CAS No |
|---|---|---|---|---|---|
| Methyl Orange (Na) | - | 327.33 | (5)-4278 | N/A | 547-58-0 |

**Impurities and Stabilizing additives which constitute the substance** No

## Section 4: FIRST AID MEASURES

**Inhalation**
Remove to fresh air Immediate medical attention is required
**Skin contact**
Wash off immediately with soap and plenty of water Get medical attention if irritation develops and persists
**Eye contact**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediate medical attention is required
**Ingestion**
Rinse mouth Never give anything by mouth to an unconscious person Call a physician or poison control center immediately Do not induce vomiting without medical advice
**Protection of first-aiders**
Use personal protective equipment as required

## Section 5: FIRE FIGHTING MEASURES

**Suitable extinguishing media**
carbon dioxide (CO2), dry chemical, dry sand, alcohol-resistant foam, Water spray (fog)
**Unsuitable extinguishing media**
No information available
**Special extinguishing method**
No information available
**Specific hazards arising from the chemical product**
Thermal decomposition can lead to release of irritating and toxic gases and vapors.
**Protection of fire-fighters**
Use personal protective equipment as required Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear

## Section 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

**Environmental precautions**

To be careful not discharged to the environment without being properly handled waste water contaminated

**Methods and materials for contaminent and methods and materials for cleaning up**

Do not touch spilled material without suitable protection(See section 8). After material is completely picked up, wash the spill sit e with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or di spose of contaminated clothing.

**Recoverly, neutralization**

Sweep up together those scattered, and collect into empty container that can be sealed. Flushed with plenty of water where spilled.

**Secondary disaster prevention measures**

Clean contaminated objects and areas thoroughly observing environmental regulations

## Section 7: HANDLING AND STORAGE

### Handling

**Technical measures**

Avoid contact with strong oxidizing agents. Use with local exhaust ventilation.

**Precautions**

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

**Safety handling precautions**

Avoid contact with skin and eyes Do not breathe dust/fume/gas/mist/vapors/spray Use personal protective equipment as required

### Storage

**Safe storage conditions**

| | |
|---|---|
| **Storage conditions** | Keep container protect from light, store in well-ventilated place at room temperature (preferably cool). Keep container tightly closed. |
| **Safe packaging material** | Polyethylene |
| **Incompatible substances** | Strong oxidizing agents |

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering controls**

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

| | |
|---|---|
| **Control parameters** | Not regulated |
| **Exposure limits** | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies |

**Personal protective equipment**

| | |
|---|---|
| **Respiratory protection** | Dust mask |
| **Hand protection** | Protective gloves |
| **Eye protection** | protective eyeglasses or chemical safety goggles |
| Skin and body protection | Long-sleeved work clothes, protective boots |

**General hygiene considerations**

Do not eat, drink or smoke when using this product

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Form** | orange - brown crystals - crystalline powder |
| **Odor** | No data available |
| **pH** | No data available |
| **Melting point/freezing point** | > 300 °C |
| **Boiling point, initial boiling point and boiling range** | No data available |
| **Flash point** | No data available |
| **Evaporation rate:** | No data available |
| **Flammability (solid, gas):** | No data available |
| **Upper/lower flammability or explosive limits** | |
| **Upper：** | No data available |
| **Lower：** | No data available |
| **Vapour pressure** | No data available |
| **Vapour density** | No data available |
| **Specific Gravity (relatinve density)** | 0.987 |
| **Solubilities** | hot water : soluble . cold water , ethanol , ether : very slightly soluble. . |
| **n-Octanol/water partition coefficient: (log Pow)** | No data available |
| **Auto-ignition temperature:** | No data available |
| **Decomposition temperature:** | No data available |
| **Viscosity (coefficient of viscosity)** | No data available |
| **Dynamic viscosity** | No data available |

## Section 10: STABILITY AND REACTIVITY

**Stability**

| | |
|---|---|
| **Stability** | May be altered by light. |
| **Reactivity** | No data available |

**Hazardous reactions**

None under normal processing

**Conditions to avoid**

Extremes of temperature and direct sunlight

**Incompatible materials**

Strong oxidizing agents

**Hazardous decomposition products**

Carbon monooxide (CO), carbon dioxide (CO2), Nitrogen oxides (NOx), Sulfur oxides (SOx)

## Section 11: TOXICOLOGICAL INFORMATION

**Acute toxicity**

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Methyl Orange (Na) | 60 mg/kg ( Rat ) | N/A | N/A |

| | |
|---|---|
| **Skin irritation/corrosion** | No data available |
| **Serious eye damage/ irritation** | No data available |
| **Respiratory or skin sensitization** | No data available |
| **Reproductive cell mutagenicity** | No data available |
| **Carcinogenicity** | No data available |
| **Reproductive toxicity** | No data available |
| **STOT-single exposure** | No data available |
| **STOT-repeated exposure** | No data available |
| **Aspiration hazard** | No data available |

## Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity**

| | |
|---|---|
| **Other data** | No data available |

| | |
|---|---|
| **Persistence and degradability** | No information available |
| **Bioaccumulative potential** | No information available |
| **Mobility in soil** | No information available |
| **Hazard to the ozone layer** | No information available |

## Section 13: DISPOSAL CONSIDERATIONS

**Waste from residues**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated container and contaminated packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

## Section 14: TRANSPORT INFORMATION

**ADR/RID**

| | |
|---|---|
| **UN number** | UN3143 |
| **Proper shipping name:** | Dye, solid, toxic, n.o.s. (Methyl orange) |
| **UN classfication** | 6.1 |
| **Subsidiary hazard class** | |
| **Labels** | |
| **Packing group** | III |
| **ERG Code** | 6L |
| **Marine pollutant** | No |

**IMDG**

| | |
|---|---|
| **UN number** | UN3143 |
| **Proper shipping name:** | Dye, solid, toxic, n.o.s. (Methyl orange) |
| **UN classfication** | 6.1 |
| **Subsidiary hazard class** | |
| **Packing group** | III |
| **EmS-No** | F-A, S-A |
| **Marine pollutant (Sea)** | No |

**IATA**

| | |
|---|---|
| **UN number** | UN3143 |
| **Proper shipping name:** | Dye, solid, toxic, n.o.s. (Methyl orange) |
| **UN classfication** | 6.1 |
| **Subsidiary hazard class** | |
| **Packing group** | III |
| **Enviromenntally Hazardous Substance** | No |

## Section 15: REGULATORY INFORMATION

**International Inventories**

| | |
|---|---|
| **EINECS/ELINCS** | - |
| **TSCA** | - |

**Japanese regulations**

| | |
|---|---|
| **Fire Service Act** | No |

| | |
|---|---|
| **Poisonous and Deleterious Substances Control Law** | No |
| **Industrial Safety and Health Act** | No |
| **Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc** | No |
| **Regulations for the carriage and storage of dangerous goods in ship** | Toxic Substances - Poison (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1) |
| **Civil Aeronautics Law** | Toxic and Infectious Substances (Ordinance Art.194, MITL Nortification for Air Transportation of Explosives etc., Attached Table 1) |
| **Marine Pollution Prevention Law** | |
| **Pollutant Release and Transfer Register Law** | No |
| **Water Pollution Control Act** | No |
| **ETCO** | Not applicable |

## Section 16: OTHER INFORMATION

**Literature and references**

**Revision Note** No information available

**Disclaimer**

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, 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.
GHS Classification is acoording to JIS Z7252(2010). *JIS: Japanese Industrial Standards

**End of Safety Data Sheet**