OXFORD LAB FINE CHEM LLP

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Oxford
Range of
Laboratory Chemicals

MATERIAL SAFETY DATA SHEET

METHYL ORANGE INDICATOR AR
(pH Indicator)
MSDS CAS: 547-58-0

Section 1: Chemical Product and Company Identification

Section 1: Chemical Product
Product Name: Methyl Orange Indicator AR
CAS#: 547-58-0
Synonym: Acid Orange 52; Sodium Dimethylaminobenzenesulfonate; 4-[Dimethylamino)pnenylazo]benzenesulfonic Acid, sodium salt; Orange III; Tropaeolin D
Chemical Name: Methyl Orange
Chemical Formula: C14H14N3NaO3S
Brand : OXFORD
Details Of The Supplier Of The Safety Data Sheet :

Company identification: **OXFORD LAB FINE CHEM LLP**
Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,
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Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Methyl orange	547-58-0	100

Toxicological Data on Ingredients: **Methyl orange: ORAL (LD50): Acute: 60 mg/kg [Rat].**

Section 3: Hazards Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Severe over-exposure can result in death.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. WARM water MUST be used. Get medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. Seek medical attention.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...). Some metallic oxides.

Fire Hazards in Presence of Various Substances:
Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:
Poisonous solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

Section 7: Handling and Storage

Precautions:

Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 25°C (77°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: **Not available.**

Section 9: Physical and Chemical Properties

Physical state and appearance:	**Solid. (Powdered solid. Metal solid.)**
Odor:	**Odorless.**
Taste:	**Not available.**
Molecular Weight:	**327.34 g/mole**
Color:	**Orange-Yellow.**
pH (1% soln/water):	**Not applicable.**

Section 9: Physical and Chemical Properties (Continued)

pH (1% soln/water):	**Not available.**
Boiling Point:	**Not available.**
Melting Point:	**>300°C (572°F)**
Critical Temperature:	**Not available.**
Specific Gravity:	**Not available.**
Vapor Pressure:	**Not applicable.**
Vapor Density:	**Not available.**
Volatility:	**Not available.**
Odor Threshold:	**Not available.**
Water/Oil Dist. Coeff.:	**Not available.**
Ionicity (in Water):	**Not available.**
Dispersion Properties:	**Not available.**

Solubility: **Partially soluble in hot water. Very slightly soluble in cold water. Insoluble in diethyl ether. Practically insoluble in alcohol. Soluble in Pyrimidine.**

Section 10: Stability and Reactivity Data

Stability: **The product is stable.**

Instability Temperature: **Not available.**

Conditions of Instability: **Excess heat, incompatible materials**

Incompatibility with various substances: **Reactive with oxidizing agents, acids.**

Corrosivity: **Non-corrosive in presence of glass.**

Special Remarks on Reactivity: **Not available.**

Special Remarks on Corrosivity: **Not available.**

Polymerization: **Will not occur.**

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 60 mg/kg [Rat].

Chronic Effects on Humans: MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May affect genetic material

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: Dust may cause eye irritation. This product contains an anionic dye. Similar dyes have not caused injury to the cornea or conjunctiva in documented exposure cases with human or rabbit eyes. Inhalation: Dust may cause respiratory tract irritation, Ingestion: Harmful is swallowed. May cause gastrointestinal tract irritation with nausea, vomiting, and diarrhea. The toxicological properties of this substance have not been fully investigated.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

Land transport (ADR-RID)

Proper shipping name: DYE, SOLID, TOXIC, N.O.S. or DYE INTERMEDIATE, SOLID, TOXIC, N.O.S
UN N°: 3143
H.I. nr: 60
ADR - Class: 6.1

Sea transport (IMDG) [English only]

Proper shipping name: DYE, SOLID, TOXIC, N.O.S. or DYE INTERMEDIATE, SOLID, TOXIC, N.O.S
UN N°: 3143
IMO-IMDG - Class or division: 6.1 : Toxic substances.
IMO-IMDG - Packing group: III

Air transport (ICAO-IATA) [English only]

Proper shipping name: DYE, SOLID, TOXIC, N.O.S. or DYE INTERMEDIATE, SOLID, TOXIC, N.O.S
UN N°: 3143
IATA - Class or division: 6.1 : Toxic substances.
IATA - Packing group: III

Section 15: Other Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: Methyl orange

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:
WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):
R25- Toxic if swallowed. S28- After contact with skin, wash immediately with plenty of water. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Section 15: Other Regulatory Information (Continued)

HMIS (U.S.A.):
Health Hazard: 2
Fire Hazard: 1
Reactivity: 0
Personal Protection: E

National Fire Protection Association (U.S.A.):
Health: 2
Flammability: 1
Reactivity: 0
Specific hazard:

Protective Equipment: Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

Section 16 - Additional Information

References: Not available.

Other Special Considerations: Not available.

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