

METHYL ORANGE, 0.1% SOLUTION

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1. Product Identification

Synonyms: Methyl Orange TS; Methyl Orange 0.1% (w/v) Aqueous pH 3.2 to 4.4; Methyl Orange test solution; C.I. 13025 0.1% solution

CAS No.: 547-58-0

Molecular Weight: 327.35

Chemical Formula: $C_{14}H_{14}N_3NaO_3S$

Product Codes: CHEM-606 and others.

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
C.I. Acid Orange	52 547-58-0	0.1%	No
Water	7732-18-5	99.9%	No

3. Hazards Identification

Emergency Overview:

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

SAF-T-DATA^(tm) Ratings

Health Rating: 0 - None

Flammability Rating: 0 - None

Reactivity Rating: 0 - None

Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES; LAB COAT

Storage Color Code: Green (General Storage)

Inhalation:

No adverse health effects expected from inhalation.

Ingestion:

Not expected to be a health hazard via ingestion. Large doses may cause stomach upset.

Skin Contact:

Not expected to be a health hazard. May cause slight irritation.

Eye Contact:

Not expected to be a health hazard. Splashes may cause irritation.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Inhalation:

Not expected to require first aid measures.

Ingestion:

Not expected to require first aid measures. If large amounts were swallowed, give water to drink and get medical advice.

Skin Contact:

Not expected to require first aid measures. Wash exposed area with soap and water. Get medical advice if irritation develops.

Eye Contact:

Not expected to require first aid measures. Wash thoroughly with running water. Get medical advice if irritation develops.

5. Fire Fighting Measures

Fire:

Not considered to be a fire hazard.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

Use protective clothing and breathing equipment appropriate for the surrounding fire.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage, direct sunlight, and freezing. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

Not expected to require any special ventilation.

Personal Respirators (NIOSH Approved):

Not expected to require personal respirator usage.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Safety glasses.

9. Physical and Chemical Properties

Appearance:

Clear, orange liquid.

Odor:

Odorless.

Solubility:

Completely soluble in water.

Specific Gravity:

~1.0

pH:

3.2-4.4

% Volatiles by volume @ 21°C (70°F):

No information found.

Boiling Point:

~100°C (~212°F)

Melting Point:

~0°C (~32°F)

Vapor Density (Air=1):

Essentially the same as water.

Vapor Pressure (mm Hg):

Essentially the same as water.

Evaporation Rate (BuAc=1):

Essentially the same as water.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

No hazardous decomposition products.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Not applicable.

Conditions to Avoid:

No information found.

11. Toxicological Information

Toxicological Data:

Methyl orange: oral rat LD50: 60 mg/kg; investigated as a mutagen.

Cancer Lists

NTP Carcinogen

Ingredient	Known	Anticipated	IARC Category
C.I. Acid Orange 52 (547-58-0)	No	No	None
Water (7732-18-5)	No	No	None

12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Dilute with water and flush to sewer if local ordinances allow, otherwise, whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

Chemical Inventory Status - Part 1

Ingredient	TSCA	EC	Japan	Australia
C.I. Acid Orange 52 (547-58-0)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

Chemical Inventory Status - Part 2

Ingredient	Canada			
	Korea	DSL	NDSL	Phil.
C.I. Acid Orange 52 (547-58-0)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	No	Yes

Federal, State & International Regulations - Part 1

Ingredient	SARA 302 SARA 313			
	RQ	TPQ	List	Chemical Catg.
C.I. Acid Orange 52 (547-58-0)	No	No	No	No
Water (7732-18-5)	No	No	No	No

Federal, State & International Regulations - Part 2

Ingredient	RCRA TSCA		
	CERCLA	261.33	8(d)
C.I. Acid Orange 52 (547-58-0)	No	No	No
Water (7732-18-5)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No SARA 311/312: Acute: No Chronic: No Fire: No Pressure: No Reactivity: No (Mixture / Liquid)

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 0 Flammability: 0 Reactivity: 0

Label Hazard Warning:

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Label Precautions:

None.

Label First Aid:

Not applicable.

Product Use:

Laboratory Reagent and Consumer Hobby.

Revision Information:

None

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