

# Safety Data Sheet

## Methyl Orange, Sodium Salt

**CAROLINA**<sup>®</sup>  
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### Section 1

### Product Description

**Product Name:** Methyl Orange, Sodium Salt  
**Recommended Use:** Science education applications  
**Synonyms:** 4-((4-(Dimethylamino)phenyl)azo)benzenesulfonic Acid, Sodium Salt, CI Acid Orange 52, CI 13025  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2

### Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**DANGER**



Toxic if swallowed. May cause genetic defects.

**GHS Classification:**

Germ Cell Mutagenicity Category 1B, Acute Toxicity - Oral Category 3

**Other Safety Precautions:**

IF exposed or concerned: Get medical advice/attention.

### Section 3

### Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Methyl Orange, Sodium Salt	547-58-0	100

### Section 4

### First Aid Measures

**Emergency and First Aid Procedures**

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.  
**Eyes:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
**Skin Contact:** After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.  
**Ingestion:** IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

### Section 5

### Firefighting Procedures

**Extinguishing Media:** Use dry chemical, CO2 or appropriate foam.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
**Fire and/or Explosion Hazards:** Fire or excessive heat may produce hazardous decomposition products.  
**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide, Nitrogen containing gases, Sulfur Oxides

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## Section 6

## Spill or Leak Procedures

### Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Avoid the generation of dusts during clean-up.

### Methods for Clean-up

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

## Section 7

## Handling and Storage

### Handling:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with clothing.

### Storage:

Store locked up. Keep container tightly closed in a cool, well-ventilated place.

### Storage Code:

Blue - Toxic. Store separately in a secured area.

## Section 8

## Protection Information

### Chemical Name

Methyl Orange, Sodium Salt

### ACGIH

#### (TWA)

N/A

#### (STEL)

N/A

### OSHA PEL

#### (TWA)

N/A

#### (STEL)

N/A

### Control Parameters

#### Engineering Measures:

No exposure limits exist for the constituents of this product. Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort. Lab coat, apron, eye wash, safety shower.

#### Personal Protective Equipment (PPE):

##### Respiratory Protection:

##### Respirator Type(s):

None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection. Wear chemical splash goggles when handling this product. Have an eye wash station available.

##### Eye Protection:

##### Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

##### Gloves:

No information available

## Section 9

## Physical Data

**Formula:** C<sub>14</sub>H<sub>14</sub>N<sub>3</sub>O<sub>3</sub>Na

**Molecular Weight:** 327.33

**Appearance:** Orange to Yellow Crystalline Solid

**Odor:** No data available

**Odor Threshold:** No data available

**pH:** No data available

**Melting Point:** > 300 C

**Boiling Point:** No data available

**Flash Point:** No data available

**Flammable Limits in Air:** No data available

**Vapor Pressure:** No data available

**Evaporation Rate (BuAc=1):** No data available

**Vapor Density (Air=1):** No data available

**Specific Gravity:** No data available

**Solubility in Water:** Slightly Soluble

**Log Pow (calculated):** -0.66 (est)

**Autoignition Temperature:** No data available

**Decomposition Temperature:** No data available

**Viscosity:** No data available

**Percent Volatile by Volume:** No data available

## Section 10

## Reactivity Data

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<b>Reactivity:</b>	Not generally reactive under normal conditions.
<b>Chemical Stability:</b>	Stable under normal conditions.
<b>Conditions to Avoid:</b>	None known.
<b>Incompatible Materials:</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products:</b>	Sulfur Oxides, Nitrogen containing gases, Carbon dioxide, Carbon monoxide
<b>Hazardous Polymerization:</b>	Will not occur

## Section 11 Toxicity Data

<b>Routes of Entry</b>	Inhalation and ingestion.
<b>Symptoms (Acute):</b>	No data available
<b>Delayed Effects:</b>	No data available

<b>Acute Toxicity:</b>				
<b>Chemical Name</b>	<b>CAS Number</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
Methyl Orange, Sodium Salt	547-58-0	Oral LD50 Rat 60 mg/kg	Not determined	Not determined

<b>Carcinogenicity:</b>				
<b>Chemical Name</b>	<b>CAS Number</b>	<b>IARC</b>	<b>NTP</b>	<b>OSHA</b>
Methyl Orange, Sodium Salt	547-58-0	Not listed	Not listed	Not listed

<b>Chronic Effects:</b>	
<b>Mutagenicity:</b>	Evidence of a mutagenic effect.
<b>Teratogenicity:</b>	No evidence of a teratogenic effect (birth defect).
<b>Sensitization:</b>	No evidence of a sensitization effect.
<b>Reproductive:</b>	No evidence of negative reproductive effects.
<b>Target Organ Effects:</b>	
<b>Acute:</b>	No data available
<b>Chronic:</b>	No data available

## Section 12 Ecological Data

<b>Overview:</b>	This material is not expected to be harmful to the ecology.
<b>Mobility:</b>	This material is expected to have moderate mobility in soil. It absorbs to most soil types.
<b>Persistence:</b>	Dissolved into water
<b>Bioaccumulation:</b>	Bioconcentration is not expected to occur.
<b>Degradability:</b>	Biodegrades at a moderate rate.
<b>Other Adverse Effects:</b>	No data

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Eco Toxicity</b>
Methyl Orange, Sodium Salt	547-58-0	

## Section 13 Disposal Information

<b>Disposal Methods:</b>	Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
<b>Waste Disposal Code(s):</b>	Not Determined

## Section 14 Transport Information

<b>Ground - DOT Proper Shipping Name:</b>	<b>Air - IATA Proper Shipping Name:</b>
UN 2811	UN 2811
Toxic Solids Organic, N.O.S.	Toxic Solids Organic, N.O.S.
(Methyl Orange, Sodium Salt)	(Methyl Orange, Sodium Salt)
Division 6.1	Division 6.1
P.G. II	P.G. II

# Safety Data Sheet

## Section 15

## Regulatory Information

**TSCA Status:**

All components in this product are on the TSCA Inventory.

**Chemical Name****CAS  
Number****§ 313 Name****§ 304 RQ****CERCLA RQ****§ 302 TPQ****CAA 112(2)  
TQ**

Methyl Orange, Sodium Salt

547-58-0

No

No

No

No

No

**California Prop 65:**

No California Proposition 65 ingredients

## Section 16

## Additional Information

**Revised: 03/12/2025**

**Replaces: 04/12/2024**

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

**Glossary**

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health