S A F E T Y D A T A S H E E T

Methyl Orange Indicator, Pure

CAS: 547-58-0 | Catalog: ASD-633 | Prepared in accordance with GHS/SDS requirements
Issue Date: 2025 | Revision: 1.0 | Supersedes: All previous versions

SECTION 1 — IDENTIFICATION

Product Name	Methyl Orange Indicator, Pure
Catalog Number	ASD-633
CAS Number	547-58-0
Chemical Name	Sodium 4-[(4-dimethylaminophenyl)azo]benzenesulphonate
Intended Use	pH indicator for laboratory analytical use only
Supplier	AuSaMicS Pty Ltd, Australia
Emergency Contact	Poisons Information Centre (Australia): 13 11 26
Website	ausamics.com.au

SECTION 2 — HAZARD IDENTIFICATION

GHS Classification: Acute Toxicity — Oral Category 4 (H302: Harmful if swallowed). Eye Irritation Category 2 (H319: Causes serious eye irritation).

Signal Word: WARNING

Hazard Statements:

- H302 — Harmful if swallowed
- H319 — Causes serious eye irritation

Precautionary Statements:

- P260 — Avoid breathing dust
- P264 — Wash hands thoroughly after handling
- P270 — Do not eat, drink, or smoke when using this product
- P280 — Wear protective gloves, eye/face protection
- P301+P312 — IF SWALLOWED: Call Poisons Information Centre (13 11 26) if feeling unwell
- P305+P351+P338 — IF IN EYES: Rinse cautiously with water for several minutes; seek medical advice
- P501 — Dispose of contents in accordance with local regulations

SECTION 3 — COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Content	GHS Classification

Methyl Orange (Sodium salt)	547-58-0	**97.3%**	Acute Tox. 4 (H302); Eye Irrit. 2 (H319)

SECTION 4 — FIRST AID MEASURES

Route	First Aid Action
Eye Contact	Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses if present. Seek medical attention — causes serious eye irritation.
Skin Contact	Wash thoroughly with soap and water for at least 10 minutes. Remove contaminated clothing.
Inhalation	Move to fresh air. If breathing difficulties develop, seek medical attention.
Ingestion	Do NOT induce vomiting. Rinse mouth with water. Call Poisons Information Centre (13 11 26) immediately. Harmful if swallowed.

SECTION 5 — FIRE-FIGHTING MEASURES

- Suitable extinguishing media: Water spray, foam, dry powder, CO_2
- Not classified as flammable under standard conditions
- Combustion may produce toxic fumes including nitrogen and sulfur oxides, and sodium compounds
- Fire-fighters should wear self-contained breathing apparatus and full protective clothing

SECTION 6 — ACCIDENTAL RELEASE MEASURES

- Personal precautions: Wear gloves, eye protection, and dust mask. Avoid generating dust.
- Environmental: Avoid release to waterways or drains — may cause discolouration and is harmful to aquatic organisms
- Clean-up: Sweep carefully or vacuum. Collect in sealed containers. Dispose per local regulations.

SECTION 7 — HANDLING AND STORAGE

Aspect	Guidelines
Handling	Avoid dust generation. Do not eat, drink, or smoke during handling. Wash hands and exposed skin after use. Use in a well-ventilated area.
Storage	Cool, dry, well-ventilated area. Tightly closed container. Protect from light.
Incompatibilities	Strong oxidising agents; strong acids and bases; reactive metals.

SECTION 8 — EXPOSURE CONTROLS / PERSONAL PROTECTION

PPE	Specification

Respiratory	P2 dust mask when handling powder. Ensure adequate ventilation at all times.
Hand Protection	Nitrile or rubber gloves
Eye Protection	Safety goggles — this substance causes serious eye irritation
Skin/Body	Laboratory coat; closed-toe footwear. Product may stain skin and clothing.
OEL	No specific OEL established. Apply good laboratory practice.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical Form	Solid (powder)
Colour	Dark orange
Odour	Odourless
Molecular Formula	$C_{14}H_{14}N_3NaO_3S$
Molecular Weight	327.33 g/mol
Solubility in Water	Soluble — clear orange solution at 0.1%
pH Transition	3.1 (Pink) → 4.4 (Orange-Yellow)
Flammability	Not classified as flammable
Loss on Drying	1.39% at 110°C / 1 hr

SECTION 10 — STABILITY AND REACTIVITY

- Stable under recommended storage conditions
- Conditions to avoid: Strong direct light, high temperatures, moisture
- Incompatible materials: Strong oxidising agents; strong acids and bases
- Hazardous decomposition products: Nitrogen oxides, sulfur oxides, and sodium compounds upon combustion
- Hazardous polymerisation: Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	Harmful if swallowed — GHS Acute Toxicity Category 4 (H302)
Eye Irritation	Causes serious eye irritation — GHS Category 2 (H319)
Skin Irritation	Not classified; may cause mild irritation on prolonged contact
Sensitisation	No data indicating skin or respiratory sensitisation
Carcinogenicity	Not classified as carcinogenic based on available data
Mutagenicity	Not classified

SECTION 12 — ECOLOGICAL INFORMATION

- Aquatic toxicity: May be harmful to aquatic organisms — avoid discharge to waterways
- Azo dyes may undergo reductive cleavage under anaerobic conditions; exercise caution with wastewater disposal
- Biodegradability: Moderate — subject to aerobic microbial degradation
- Bioaccumulation: Low potential

SECTION 13 — DISPOSAL CONSIDERATIONS

- Dispose of unused product in accordance with local and national regulations
- Do NOT discharge to drains or waterways without treatment
- Contact a licensed waste disposal company for guidance on azo dye waste streams

SECTION 14 — TRANSPORT INFORMATION

UN Number	Not classified as dangerous goods for transport (ADG/IATA/IMDG)
Packing Group	Not applicable
Special Notes	Keep dry and protected from light during transport

SECTION 15 — REGULATORY INFORMATION

Australia (Safe Work Australia): Classified as a hazardous substance — Harmful if swallowed (H302), Causes serious eye irritation (H319). Comply with applicable workplace health and safety legislation. This product is for laboratory analytical use only.

SECTION 16 — OTHER INFORMATION

Prepared By	AuSaMicS Pty Ltd — Quality & Regulatory Affairs
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