

SAFETY DATA SHEET

Erythrosine B (FD&C Red No. 3)

CAS: 16423-68-0 | Catalog: ASD-638 | Prepared in accordance with GHS/SDS requirements

Issue Date: 2025 | Revision: 1.0 | Supersedes: All previous versions

SECTION 1 — IDENTIFICATION

Product Name	Erythrosine B; Erythrosin B sodium salt
Common Names	FD&C Red No. 3, E127, Food Red 14, Acid Red 51
Catalog Number	ASD-638
CAS Number	16423-68-0
C.I. No. / EEC	45430 E127
Intended Use	Food-grade dye and laboratory reagent
Supplier	AuSaMicS Pty Ltd
Address	31 Longview CT, Thomastown, VIC 3074, Australia
ABN	ABN: 56 676 640 467
Phone	+61 412 520 598
Email	support@ausamics.com
Website	www.ausamics.com.au
Emergency Contact	Poisons Information Centre (Australia): 13 11 26

SECTION 2 — HAZARD IDENTIFICATION

GHS Classification: Not classified as a hazardous substance under GHS criteria based on available data. Contains iodine-bearing organic compounds — avoid ingestion of large quantities. Intended for professional use only.

Signal Word: Not required for this substance at normal use levels.

Precautionary Statements:

- P260 — Avoid breathing dust
- P264 — Wash hands thoroughly after handling
- P270 — Do not eat, drink, or smoke when using outside of permitted food-grade applications
- P280 — Wear protective gloves and eye/face protection
- P501 — Dispose of contents in accordance with local regulations

SECTION 3 — COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Content	GHS Classification
Erythrosin B disodium salt (Tetraiodofluorescein)	16423-68-0	≥ 92%	Not classified
Moisture / water of crystallisation	7732-18-5	≤ 11.5%	Not hazardous

SECTION 4 — FIRST AID MEASURES

Route	First Aid Action
Eye Contact	Rinse immediately with water for at least 15 minutes. Seek medical attention if irritation persists.
Skin Contact	Wash with soap and water. Product may stain skin. Irritation unlikely at normal exposure levels.
Inhalation	Move to fresh air. Seek medical attention if respiratory irritation develops.
Ingestion	Rinse mouth with water. Food-approved at permitted levels — avoid ingestion of concentrated powder. Contact Poisons Information Centre (13 11 26) if large amounts ingested.

SECTION 5 — FIRE-FIGHTING MEASURES

- Suitable extinguishing media: Water spray, foam, dry powder, CO₂
- Not classified as flammable under standard conditions
- Combustion may produce iodine vapour and carbon/nitrogen oxides
- Fire-fighters: wear self-contained breathing apparatus and full protective clothing

SECTION 6 — ACCIDENTAL RELEASE MEASURES

- Wear gloves and eye protection; avoid generating dust
- Sweep or vacuum carefully — product will stain surfaces and textiles
- Collect in sealed containers and dispose per local regulations
- Prevent entry to drains or waterways — may cause persistent discolouration

SECTION 7 — HANDLING AND STORAGE

Aspect	Guidelines
Handling	Avoid dust generation. Use in well-ventilated area. Handle with care — powerful staining dye.
Storage	Cool, dry, tightly sealed — away from direct sunlight.
Incompatibilities	Strong oxidising agents; concentrated acids and bases.

SECTION 8 — EXPOSURE CONTROLS / PERSONAL PROTECTION

PPE	Specification
Respiratory	P2 dust mask when handling powder in quantity; general ventilation for routine use
Hands / Eyes	Nitrile gloves; safety glasses — product is a powerful staining dye
Body / Clothing	Laboratory coat; closed-toe footwear — wear protective clothing to avoid permanent staining
OEL	No specific OEL established — apply good laboratory practice

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical Form	Solid (crystalline powder)
Colour	Dark cherry-red
Odour	Odourless
Molecular Formula	$C_{20}H_{14}I_4Na_2O_5$
Molecular Weight	879.86 g/mol
Solubility	Freely soluble in water — brilliant pink-red solution
Dye Content	≥ 92%
Flammability	Not classified as flammable
Iodine Content	High — 4 iodine atoms per molecule

SECTION 10 — STABILITY AND REACTIVITY

- Stable under recommended storage conditions
- Conditions to avoid: Direct sunlight, high humidity, strong oxidising agents
- Hazardous decomposition: Iodine vapour, carbon oxides, sodium compounds upon combustion
- Hazardous polymerisation: Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	Low toxicity — food-approved at permitted levels; avoid ingestion of concentrated powder
Skin Irritation	Not classified — may cause temporary staining
Eye Irritation	May cause mild mechanical irritation from dust

Iodine Note	High iodine load per molecule — caution in individuals with thyroid conditions
Carcinogenicity	Not classified as carcinogenic based on available data
Sensitisation	Not classified as a sensitiser

SECTION 12 — ECOLOGICAL INFORMATION

- Not classified as acutely aquatically toxic — may cause persistent discolouration of water
- Iodine-containing compound — avoid large-scale release to the environment
- Biodegradability: Moderate under aerobic conditions
- Bioaccumulation potential: Low

SECTION 13 — DISPOSAL CONSIDERATIONS

- Dispose of in accordance with local and national regulations for synthetic dyes
- Do not discharge concentrated solutions to drains or waterways without treatment
- Contact a licensed waste disposal company for large quantity disposal

SECTION 14 — TRANSPORT INFORMATION

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

SECTION 15 — REGULATORY INFORMATION

Food-approved dye: E127 (EU/EEC) and FD&C Red No. 3 (USA). Subject to category-specific use restrictions. Comply with applicable FSANZ, FDA, and EU regulations. Supplier: AuSaMicS Pty Ltd | 31 Longview CT, Thomastown, VIC 3074, Australia | ABN: 56 676 640 467 | +61 412 520 598 | support@ausamics.com

SECTION 16 — OTHER INFORMATION

Prepared By	AuSaMicS Pty Ltd — Quality & Regulatory Affairs
Address	31 Longview CT, Thomastown, VIC 3074, Australia
ABN	ABN: 56 676 640 467
Phone / Email	+61 412 520 598 support@ausamics.com
Website	www.ausamics.com.au
Issue Date	2025



Safety Data Sheet (GHS)

SDS-ASD-638

www.ausamics.com.au

Revision

Version 1.0

DISCLAIMER

The information provided in this document is based on data considered accurate at the time of issue. AuSaMicS Pty Ltd has taken reasonable care in its preparation but does not warrant completeness or accuracy for all applications. This product is intended exclusively for laboratory research use by qualified professionals — not for human or veterinary therapeutic use, food, feed, or pharmaceutical manufacturing. Users are responsible for validating the product for their specific application and for compliance with all applicable local, state, and federal regulations. AuSaMicS Pty Ltd's liability is limited to the purchase price of the product. This document is subject to change without notice — refer to ausamics.com.au for the current version.

AuSaMicS Pty Ltd | 31 Longview CT, Thomastown, VIC 3074, Australia | ABN: 56 676 640 467
www.ausamics.com.au | support@ausamics.com | +61 412 520 598