

MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name: Erythrosin B
C.I. 45430 Acid Red 51
CAS number: 16423-68-0
EINECS number: 240-474-8
Product code: DYE104
Brand: Solmedia Ltd

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: PC21: Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Name of Supplier: Solmedia Ltd.

Address of Supplier: Unit 2, Vernon Drive

Battlefield Enterprise Park

Shrewsbury SY1 3TF UK

Telephone: 0844 80 80 900

Email: labsupplies@solmedialtd.com

1.4 Emergency telephone number

Emergency Phone: +44 (0)844 80 80 900

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification under CLP: Regulation (EC) No. 1272/2008 [CLP]

Hazard Class	Hazard Category	Hazard Statement
Acute toxicity	Category 4	H302
Long-term (chronic) aquatic hazard	Category 2	H411

2.2 Label elements

Label elements under CLP:

Hazard statements: H302: Harmful if swallowed.

H411: May cause long lasting harmful effects to aquatic life.

Signal words: Warning

Datasheet number: DYE104 v2.0.0



Hazard pictograms: GHS07: Exclamation mark



Precautionary statements:

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P301+P312 IF SWALLOWED: Call a poison center/doctor if you feel

unwell.

P391 Collect spillage.

P501 Dispose of contents/container to an approved waste disposal

plant.

2.3 Other hazards

Other hazards: This substance/mixture contains no components considered to be

either persistent, bioaccumulative and toxic (PBT), or very persistent

and very bioaccumulative (vPvB) at levels of 0.1% or higher.

PBT: This product is not identified as a PBT/vPvB substance.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical identity: Erythrosin B C.I. 45430

Synonyms: 3',6'-dihydroxy-2',4',5',7'-tetraiodo-3-oxospiro[isobenzofuran-

1(3H),9'[9H]xanthen] disodium salt CAS number: 16423-68-0 EINECS number: 240-474-8

Contains: Formula: C20H6I4Na2O5

Molecular weight: 879.86 g/mol

SECTION 4: First aid measures

4.1 Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: Flush eyes with water as a precaution.

Ingestion: Never give anything by mouth to an unconscious person. Wash out

mouth with water. Consult a doctor.

Datasheet number: DYE104 v2.0.0



Inhalation: Move to fresh air in case of accidental inhalation of vapours. If

unconscious, check for breathing and apply artificial respiration if

necessary. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Inhalation: No data available.

Delayed / immediate effects:

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Water spray. Alcohol resistant foam. Dry chemical powder. Carbon

dioxide.

5.2 Special hazards arising from the substance or mixture

Not applicable.

5.3 Advice for firefighters

Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8

breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Do not discharge into drains or rivers.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Datasheet number: DYE104 v2.0.0



Refer to section 13 of SDS.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and

aerosols.

Provide appropriate exhaust ventilation at places where dust is

formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed.

Hygroscopic.

Suitable packaging: Not applicable

7.3 Specific end use(s)

No special requirement.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No data available.

DNEL / PNEC No data available.

8.2 Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protective equipment

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique Handle with protective lab coat or suit with appropriate arm protection EN 340.

(Without touching glove's outer surface) to avoid skin contact with this product. Dispose of

Datasheet number: DYE104 v2.0.0

Revised June 2025 4



Contaminated gloves should be removed immediately following full contact with the substance.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact:

Glove material: nitrile rubber Glove thickness: 0.11 mm

Time until perforation: > 480 min

Wash and dry hands.

Body Protection

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type OV/AG (US) or type ABEK

(EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye protection:



Goggles recommended during refilling: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

Additional Information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Control of environmental exposure

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State: Powder

Colour: Dark red

Melting point/range°C: 315 °C at 978.5 hPa

Datasheet number: DYE104 v2.0.0

Revised June 2025 5



Flash point°C: 182 °C - closed cup

Part.coeff. n-octanol/water:

log Pow: -1.163

Relative density: 0.625 - 0.731 g/cm3

pH: 6.4 at 30.3 °C

9.2 Other safety information

Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Exposure to moisture.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

In combustion emits toxic fumes of carbon dioxide / carbon monoxide. In combustion emits toxic fumes of hydrogen iodide. In combustion emits toxic fumes of sodium oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Relevant hazards for substance:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Based on test data

Symptoms / routes of exposure

Skin contact: No data available.

Datasheet number: DYE104 v2.0.0



Eye contact: No data available.

Ingestion: No data available.

Inhalation: No data available.

Delayed / immediate effects:

No data available.

Other information: Not applicable.

SECTION 12: Ecological information

12.1 Toxicity

Ecotoxicity values:

Species	Test	Value	Units
FISH	96H LC50	500	mg/l

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This product is not identified as a PBT/vPvB substance.

12.6 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal operations: Offer surplus and non-recyclable solutions to a licensed disposal

company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner

and scrubber.

Recovery operations: Not applicable.

Disposal of packaging: Dispose of as unused product.

Datasheet number: DYE104 v2.0.0

Revised June 2025 7



NB:

The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14: Transport information

14.1 UN number

UN3077

14.2 UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (3',6'-dihydroxy2',4',5',7'-tetraiodo-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen] disodium salt)

14.3 Transport hazard class(es)

9

14.4 Packaging group

3

14.5 Environmental hazards

Environmentally hazardous:

Yes

Marine pollutant:

Yes

14.6 Special precautions for user

No data available

This product does not require a classification for transport.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

SECTION 16: Other information

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

Datasheet number: DYE104 v2.0.0



* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and 3:

H302: Harmful if swallowed.

H413: May cause long lasting harmful effects to aquatic life.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.