

Cresol red loading dye

Safety data sheet

Prepared in accordance with Regulation (EC) No. 1907/2006 (REACH)

Version 1.0 | Created: 6 May 2015 | Revised: Not applicable

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

Product name and description	Cresol red loading dye
Trade name/Brand	Not applicable
Synonym (s)	None
REACH Number	Not applicable, mixture
CAS Number	Not applicable, mixture
EC Number	Not applicable, mixture
Recommended use	This product is a laboratory preparation for educational use only (See Section 16). It is added to nucleic acid solutions before they are loaded onto an electrophoresis gel.
Uses advised against	None.
Supplier of the product and of this safety data sheet	National Centre for Biotechnology Education (NCBE) University of Reading 2 Earley Gate Whiteknights READING RG6 6AU United Kingdom T: 0118 9873743 F: 0118 9750140 E: NCBE@reading.ac.uk W: www.ncbe.reading.ac.uk
Manufacturer of the product	National Centre for Biotechnology Education (NCBE) University of Reading 2 Earley Gate Whiteknights READING RG6 6AU United Kingdom T: 0118 9873743 F: 0118 9750140 E: NCBE@reading.ac.uk W: www.ncbe.reading.ac.uk
Emergency telephone number	0118 9873743 (NCBE, University of Reading. 08.30–17.00 weekdays only)

SECTION 2. Hazards identification

Classification according to Regulation (EC) No. 1272/2008 [CLP] Unclassified

Label elements None required

Other hazards None

SECTION 3. Composition/information on ingredients

Name of component (Synonym) [CLP index number]	Weight (%)	EC (EINECS) number	CAS number	REACH registration number	Classification under Regulation (EC) No 1272/2008 [CLP]*
Water	77.64	231-791-2	7732-18-5	-	-
Sucrose (α -D-glucopyranosyl-(1 \rightarrow 2)- β -D-fructofuranoside)	21.96	200-334-9	57-50-1	-	-
EDTA disodium salt dihydrate (Disodium EDTA)	0.29	205-358-3	6381-92-6	-	Acute Tox. 4 (H332)
TRIS (Trometamol; tris(hydroxymethyl)aminomethane; 2-Amino-2-hydroxymethyl-propane-1,3-diol)	0.09	201-064-4	77-86-1	-	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)
Cresol red, sodium salt	0.02	263-654-8	62625-29-0	-	-

* Note that these classifications refer to the pure (100%) substances, not to the mixture supplied. (For example, the proportion of TRIS in the product is 10 times less than that required to trigger safety labelling).

For the full text of the safety classifications (R phrases and H statements), refer to Section 16.

SECTION 4. First Aid measures

General information	This mixture is not hazardous.
Inhalation	Move the victim to fresh air. If the victim has stopped breathing artificial respiration and/or oxygen may be necessary. Call a doctor immediately.
Skin contact	Rinse the affected area with water.
Eye contact	Check for and remove contact lenses if present. Rinse opened eye immediately with running water, also wash under the eyelids, for several minutes. Seek medical advice if irritation occurs.
Ingestion	No action necessary.
Self-protection of the first aider	Rinse your hands with water if you spill loading dye on them.
Most important symptoms and effects, both acute and delayed	Not applicable.
Indication of any immediate medical attention and special treatment	Not applicable.
Advice to doctor	Treat symptomatically.

SECTION 5. Fire-fighting measures

Extinguishing media

Not applicable.

Special hazards arising from the substance or mixture

None known.

Advice for firefighters

Not applicable.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Not applicable.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Wipe up any spills of the solution with absorbent material (e.g., paper towels) and water. Dispose of the paper towels in the normal waste.

Reference to other sections

See Section 13 for disposal instructions.

SECTION 7. Handling and storage

Precautions for safe handling

Wear a lab coat to prevent spills from damaging clothing.

Conditions for safe storage, including any incompatibilities

Keep tightly closed at room temperature. Do not refrigerate or freeze.

Specific end use(s)

Loading dye is added to nucleic acid solutions before they are loaded onto an electrophoresis gel.

SECTION 8. Exposure control/personal protection

Control parameters

Exposure limits

The product as supplied does not contain any hazardous materials with occupational exposure limits established by regulatory bodies.

Biological limit values

The product as supplied does not contain any hazardous materials with occupational exposure limits established by regulatory bodies.

Derived no effect level

No information available.

Predicated no effect level

No information available.

SECTION 9. Physical and chemical properties

Appearance	Dark red colour.
Physical state	Viscous, sticky liquid.
Odour	Odourless.
Odour threshold	Does not apply, as the mixture is odourless.
pH	8.0 @ 20 °C
Melting point / Range	No data available.
Boiling point / Range	> 100 °C @ 760 mm Hg.
Flash point	Not applicable; does not flash.
Evaporation rate	No data available.
Flammability (solid, gas)	Not applicable as the mixture is a liquid.
Explosion limits	No data available.
Vapour pressure	No data available.
Vapour density	No data available.
Density @ 20 °C	~ 2 g / ml
Relative density	Not applicable as the mixture is a liquid.
Solubility in water	Readily soluble.
Solubility in other solvents	No data available.
Partition coefficient: n-octanol/water	No data available.
Autoignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No data available.
Oxidising properties	No data available.

Other information

No additional information relevant to the safe use of the substance.

SECTION 10. Stability and reactivity

Reactivity	No information available.
Chemical stability	When stored at room temperature, the product is stable.
Possibility of hazardous reactions	No known hazardous reactions.
Conditions to avoid	Do not freeze or refrigerate.
Incompatible materials	No information available.
Hazardous decomposition products	No hazardous decomposition products.

SECTION 11. Toxicological information

Acute toxicity	No information available.
Irritation	No information available.
Corrosivity	No information available.
Sensitisation	No information available.
Repeated dose toxicity	No information available.
Carcinogenicity	No information available.
Mutagenicity	No information available.
Toxicity for reproduction	No information available.

SECTION 12. Ecological information

Toxicity	No information available.
Persistence and degradability	No information available.
Bioaccumulative potential	No information available.
Mobility in soil	No information available.
Results of PBT and vPVB assessment	No information available.
Other adverse effects	None known.

SECTION 13. Disposal considerations

Waste from residues/unused product	Wash down a foul water drain with water. Wipe up any spills of the solution with absorbent material (e.g., paper towels) and water. Dispose of the paper towels in the normal waste.
Contaminated packaging	Dispose of in normal waste according to local regulations. The containers are made of polypropylene and can be recycled.

SECTION 14. Transport information

UN number	Not applicable.
UN proper shipping name	Not applicable.
Transport hazard class	Not applicable.
Packaging group	Not applicable.
Environmental hazards	Not applicable.

SECTION 15. Regulatory information

Not regulated.

Schools and colleges in the UK should refer to *Topics in Safety*, which includes a chapter on work with DNA: *Topics in safety* (2001) [Third edition] Association for Science Education. ISBN: 0863573169.

An updated (October 2014) version of Chapter 16, covering work with DNA, can be found on the NCBE's web site: www.ncbe.reading.ac.uk and on the Association for Science Education's web site: www.ase.org.uk

SECTION 16. Other information

Full text of GHS hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Please refer to the Teacher's guide that accompanies the NCBE kit you are using the loading dye with. This can be downloaded from the NCBE's Web site: www.ncbe.reading.ac.uk

The information given in this Safety Data Sheet is based on the present state of our knowledge.

This Safety Data Sheet has been compiled and is solely intended for this product.

END OF SAFETY DATA SHEET