SAFETY DATA SHEET
Thiazine Red

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

1.1. Product identifier

Product name Thiazine Red

Product number PL.7059, PL.7060, PL.7059/25, PL.7059/100

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

Identified uses Laboratory reagent.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier

Pro-Lab Diagnostics
3 Bassendale Road
Wirral
Merseyside
CH62 3QL
Tel: 0151 353 1613
Fax: 0151 353 1614
mowen@pro-lab.com

1.4. Emergency telephone number

Emergency telephone +44 (0)151 353 1613 Monday to Friday 9.00 to 17.00
+44 (0)7714 429 646 outside the above hours

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Muta. 2 - H341

Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) Xi; R36/38. Muta. Cat. 3 R68

2.2. Label elements

Pictogram

Signal word Warning

Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H341 Suspected of causing genetic defects.

Precautionary statements	P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves, eye and face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 IF exposed or concerned: Get medical advice/ attention. P501 Dispose of contents/ container in accordance with national regulations.
Contains	phenol
Supplementary precautionary statements	P362+P364 Take off contaminated clothing and wash it before reuse. P405 Store locked up.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

phenol **1 - <2.5%**

CAS number: 108-95-2 EC number: 203-632-7

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Muta. 2 - H341 STOT RE 2 - H373 Aquatic Chronic 2 - H411	T; R23/24/25. Xn; R48/20/21/22. C; R34. Muta. Cat. 3 R68. N; R51/53

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Keep affected person away from heat, sparks and flames.
Inhalation	Immediate first aid is imperative. Loosen tight clothing such as collar, tie or belt. Maintain an open airway. Move affected person to fresh air at once. Place unconscious person on their side in the recovery position and ensure breathing can take place. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting unless under the direction of medical personnel. If in doubt, get medical attention promptly.
Skin contact	Rinse cautiously with water for several minutes. Remove contaminated clothing. Wash contaminated clothing before reuse.
Eye contact	Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately with plenty of water. Get medical attention if symptoms are severe or persist after washing.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	Symptoms following overexposure may include the following: Coughing, chest tightness, feeling of chest pressure. Drowsiness, dizziness, disorientation, vertigo. Irritation of nose, throat and airway. May cause discomfort.

Ingestion	Coughing, chest tightness, feeling of chest pressure. Gastrointestinal symptoms, including upset stomach.
Skin contact	Prolonged contact may cause redness, irritation and dry skin. Causes skin irritation. Redness.
Eye contact	Causes serious eye irritation. Profuse watering of the eyes. Prolonged contact may cause redness and/or tearing.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Water used for fire extinguishing, which has been in contact with the product, may be corrosive.

5.3. Advice for firefighters

Protective actions during firefighting	Fight fire from safe distance or protected location. Use water spray to reduce vapours. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses. Contain and collect extinguishing water.
Special protective equipment for firefighters	Use air-supplied respirator, gloves and protective goggles. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Follow precautions for safe handling described in this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Take care as floors and other surfaces may become slippery. Contain spillage with sand, earth or other suitable non-combustible material. Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Avoid breathing vapours. Avoid contact with eyes and prolonged skin contact.
Advice on general occupational hygiene	Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented. Take off contaminated clothing and wash it before reuse. Wash promptly with soap and water if skin becomes contaminated.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Keep at temperature not exceeding 25°C.

7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

phenol

Long-term exposure limit (8-hour TWA): WEL 2 ppm 7.8 mg/m³
Short-term exposure limit (15-minute): WEL 4 ppm 16 mg/m³
Sk

WEL = Workplace Exposure Limit
Sk = Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls	Avoid inhalation of vapours and spray/mists. Good general ventilation should be adequate to control worker exposure to airborne contaminants. In case of insufficient ventilation, wear suitable respiratory equipment.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Frequent changes are recommended. The breakthrough time for any glove material may be different for different glove manufacturers.
Hygiene measures	Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Seek advice from supervisor on the company's respiratory protection standards. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Red.
Odour	Almost odourless.
pH	Not relevant.
Melting point	Not relevant.

Initial boiling point and range	Not determined.
Flash point	Not determined.
Evaporation rate	Not determined.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Vapour pressure	Not determined.
Vapour density	Not relevant.
Relative density	Not determined.
Solubility(ies)	Soluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No test data specifically related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Acids. Alkalis. Oxidising agents.

10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid	Acids. Alkalis. Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO2). Carbon monoxide (CO). Nitrous gases (NOx). Hydrocarbons. Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD_{50})	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	10,000.0

Acute toxicity - dermal

Notes (dermal LD_{50})	Based on available data the classification criteria are not met.
ATE dermal (mg/kg)	66,000.0

Acute toxicity - inhalation

Notes (inhalation LC_{50})	Based on available data the classification criteria are not met.
ATE inhalation (vapours mg/l)	300.0

Skin corrosion/irritation

Animal data	Skin Irrit. 2 - H315 Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation	Eye Irrit. 2 - H319 Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation	Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation	Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro	Muta. 2 - H341 Suspected of causing genetic defects.

Carcinogenicity

Carcinogenicity	Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility	Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure	Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.

Toxicological information on ingredients.

phenol

Acute toxicity - oral

Notes (oral LD_{50})	Acute Tox. 3 - H301 Toxic if swallowed.
ATE oral (mg/kg)	100.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	660.0
Species	Rat
Notes (dermal LD_{50})	REACH dossier information. Acute Tox. 3 - H311 Toxic in contact with skin.

ATE dermal (mg/kg)	660.0

Acute toxicity - inhalation

Notes (inhalation LC_{50})	Acute Tox. 3 - H331 Toxic if inhaled.
ATE inhalation (vapours mg/l)	3.0

Skin corrosion/irritation

Animal data	Dose: 0.5 g, 24 hours, Rabbit Erythema/eschar score: Severe erythema (beef redness) to eschar formation preventing grading of erythema (4). REACH dossier information. Corrosive.

Serious eye damage/irritation

Serious eye damage/irritation	Dose: 100 mg, < 14 days, Rabbit REACH dossier information. Corrosive to skin. Corrosivity to eyes is assumed.

Skin sensitisation

Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro	Chromosome aberration: Positive. REACH dossier information. May induce heritable mutations in the germ cells of humans.

Carcinogenicity

Carcinogenicity	NOAEL 5000 ppm, Oral, Mouse REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility	Two-generation study - NOAEL 1000 mg/l, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Developmental toxicity:, Maternal toxicity: - NOAEL: 140 mg/kg/day, Oral, Mouse No evidence of reproductive toxicity in animal studies.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	STOT RE 2 - H373 May cause damage to organs through prolonged or repeated exposure.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity	Based on available data the classification criteria are not met. However, large or frequent spills may have hazardous effects on the environment.

Ecological information on ingredients.

phenol

Toxicity	Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.
Acute toxicity - fish	LC_{50}, 14 days: 21.93 mg/l, Poecilia reticulata (Guppy)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 3.1 mg/l, Ceriodaphnia dubia

Acute toxicity - aquatic plants	EC_{50}, 96 hours: 61.1 mg/l, Pseudokirchneriella subcapitata
Chronic toxicity - fish early life stage	NOEC, 60 days: 0.077 mg/l, Cirrhina mrigala
Chronic toxicity - aquatic invertebrates	NOEC, 16 days: 0.16 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product. Volatile substances are degraded in the atmosphere within a few days.

Ecological information on ingredients.

phenol

Phototransformation	Water - DT_{50} : 14 hours
Biodegradation	Water - Degradation 80.1%: 50 days

12.3. Bioaccumulative potential

Bioaccumulative potential Not determined.

Partition coefficient Not determined.

Ecological information on ingredients.

phenol

Bioaccumulative potential	BCF: 17.5, Brachydanio rerio (Zebra Fish)
Partition coefficient	log Pow: 1.47

12.4. Mobility in soil

Mobility The product contains organic solvents which will evaporate easily from all surfaces. The product contains substances which are water-soluble and may spread in water systems.

Ecological information on ingredients.

phenol

Adsorption/desorption coefficient	Water - Koc: 14-26 @ 25°C
Henry's law constant	0.022 Pa m^3/mol @ 20°C
Surface tension	71.3 mN/m @ 20°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not relevant.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Reuse or recycle products wherever possible. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.
Disposal methods	Absorb in vermiculite, dry sand or earth and place into containers. Place waste in labelled, sealed containers. Dispose of contents/container in accordance with national regulations.

SECTION 14: Transport information

General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

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

National regulations	EH40/2005 Workplace exposure limits.
EU legislation	Council Directive of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers (75/324/EEC). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Classification procedures according to Regulation (EC) 1272/2008	Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Muta. 2 - H341: Calculation method.
Revision comments	Classification according to EC 1272/2008 (CLP).
Revision date	27/09/2016
Revision	8
Supersedes date	09/04/2015
SDS number	827
Risk phrases in full	R23/24/25 Toxic by inhalation, in contact with skin and if swallowed. R34 Causes burns. R36/38 Irritating to eyes and skin. R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R68 Possible risk of irreversible effects.
Hazard statements in full	H301 Toxic if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H341 Suspected of causing genetic defects. H373 May cause damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects.

The information in this safety data sheet was obtained from current and reliable sources. However, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond Pro-Lab Diagnostics control, it is the users responsibility to perform thorough testing of this product when used in combination with any other product. It is suggested that users familiarise themselves with this safety data sheet before handling the product.