SAFETY DATA SHEET

Lactofuchsin

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 No. 758, as amended.

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

1.1. Product identifier

Product name Lactofuchsin

Product number PL.7154

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

Identified uses Laboratory reagent.

Uses advised againstNo 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 (SI 2019 No. 720)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318

Environmental hazards Not Classified

Human health Dust or splashes from the mixture may cause permanent eye damage. Causes skin irritation.

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements H315 Causes skin irritation.

H318 Causes serious eye damage.

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Precautionary statements P264 Wash contaminated skin thoroughly after handling.

P280 Wear protective gloves, eye and face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/ doctor. P302+P352 IF ON SKIN: Wash with plenty of water.

P332+P313 If skin irritation occurs: Get medical advice/ attention.

Contains lactic acid

Supplementary precautionary P362+P364 Take off contaminated clothing and wash it before reuse.

statements

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

lactic acid 50 - 100%

CAS number: 50-21-5 EC number: 200-018-0

Classification

Skin Irrit. 2 - H315 Eye Dam. 1 - H318

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for

breathing.

Ingestion Rinse mouth thoroughly with water. Give plenty of water to drink. Move affected person to

fresh air and keep warm and at rest in a position comfortable for breathing.

Skin contact Rinse cautiously with water for several minutes. Remove contaminated clothing. Continue to

rinse for at least 15 minutes and get medical attention. Wash contaminated clothing before

reuse. Chemical burns must be treated by a physician.

Eye contact Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do.

Continue rinsing. Get medical attention if symptoms are severe or persist after washing.

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

Inhalation Irritation of nose, throat and airway. Ingestion May cause discomfort if swallowed.

Skin contact This product is corrosive. May cause serious chemical burns to the skin. Pain.

Eye contact Causes serious eye damage. Conjunctivitis, irritation, tearing. Profuse watering of the eyes.

Vapour or spray in the eyes may cause irritation and smarting.

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

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5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-

extinguishing media suitable for the surrounding fire.

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

Hazardous combustion

Thermal decomposition or combustion products may include the following substances: Oxides

products of carbon. Toxic gases or vapours.

5.3. Advice for firefighters

Special protective equipment

Use protective equipment appropriate for surrounding materials.

for firefighters

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected

spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Reference to other sections See Section 11 for additional information on health hazards. For waste disposal, see Section

13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations.

Advice on general occupational hygiene

Avoid contact with eyes and prolonged skin contact.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in a cool and well-ventilated place.

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

Ingredient comments No exposure limits known for ingredient(s).

8.2. Exposure controls

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 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.

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Hygiene measures No specific hygiene procedures recommended but good personal hygiene practices should

always be observed when working with chemical products.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Liquid. Colour Magenta.

Odour Almost odourless. Odour threshold Not determined.

Not determined. pН

Not relevant. Melting point

~ 122°C @ 20 hPa Initial boiling point and range

Flash point ~ 13°C

Not determined. **Evaporation rate** Not determined. **Evaporation factor**

Not relevant. Flammability (solid, gas) Upper/lower flammability or Not relevant.

explosive limits

Vapour pressure Not determined. Vapour density Not determined.

~ 1.209 Relative density

Bulk density Not determined. Solubility(ies) Soluble in water. Partition coefficient Not determined. **Auto-ignition temperature** Not relevant. **Decomposition Temperature** Not relevant.

Viscosity Not determined.

Explosive properties Not considered to be explosive.

The mixture itself has not been tested but none of the ingredient substances meet the criteria Oxidising properties

for classification as oxidising.

9.2. Other information

Other information No information required.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

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Possibility of hazardous

reactions

products

Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid

No specific material or group of materials is likely to react with the product to produce a

hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition

None at ambient temperatures. Thermal decomposition or combustion products may include

the following substances: Oxides of carbon. Oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀)

Based on available data the classification criteria are not met.

Skin corrosion/irritation

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

Serious eye damage/irritation

Serious eye damage/irritation Eye Dam. 1 - H318 Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisationBased 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 vitroBased on available data the classification criteria are not met.

Genotoxicity - in vivoBased on available data the classification criteria are not met.

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.

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lactic acid

Acute toxicity - oral

Acute toxicity oral (LD₅o

3,543.0

mg/kg)

Species Rat

Notes (oral LD₅₀) REACH dossier information.

ATE oral (mg/kg) 3,543.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ - > 2000 mg/kg REACH dossier information.

Skin corrosion/irritation

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

Serious eye damage/irritation

Serious eye Dose: 0.03 ml, 10 seconds, Rabbit REACH dossier information. Eye Dam. 1 - H318

damage/irritation Causes serious eye damage.

Skin sensitisation

Skin sensitisation Buehler test - Rabbit: Not sensitising. REACH dossier information.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

lactic acid

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 130 mg/l, Oncorhynchus mykiss (Rainbow trout)

REACH dossier information.

Acute toxicity - aquatic

invertebrates

NOEC, 48 hours: 180 mg/l, Daphnia magna EC₅o, 48 hours: 250 mg/l, Daphnia magna

REACH dossier information.

Acute toxicity - aquatic

EC₅₀, 72 hours: 2800 mg/l, Pseudokirchneriella subcapitata

plants

REACH dossier information.

Acute toxicity - EC₅₀, 3 hours: > 100 mg/l, Activated sludge

microorganisms REACH dossier information.

12.2. Persistence and degradability

Persistence and degradability No data available.

Ecological information on ingredients.

lactic acid

Phototransformation Water - DT₅₀ : 1.8 days

REACH dossier information.

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Biodegradation Water - Degradation (50%): 5 days

Water - Degradation (67%): 20 days

REACH dossier information.

Readily biodegradable but failing the 10-day window.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

lactic acid

Henry's law constant 0.000000113 atm m³/mol REACH dossier information. QSAR model

Surface tension 70.7 mN/m @ 20°C REACH dossier information.

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 determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Dispose of waste product or used containers in accordance with local 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.

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

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.

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 No. 758, as amended. The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)

(Amendment etc.) (EU Exit) Regulations 2019 No. 720, as amended.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ADR: European Agreement concerning the International Carriage of Dangerous Goods by

Road.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways.

ATE: Acute Toxicity Estimate. BCF: Bioconcentration Factor. DNEL: Derived No Effect Level.

EC₅₀: 50% of maximal Effective Concentration. IATA: International Air Transport Association.

ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods.

LC50: Lethal Concentration to 50 % of a test population.

LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).

NOAEL: No Observed Adverse Effect Level. NOEC: No Observed Effect Concentration. PNEC: Predicted No Effect Concentration.

RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.

Classification abbreviations

and acronyms

Eye Dam. = Serious eye damage

Skin Irrit. = Skin irritation

Classification procedures according to SI 2019 No. 720

Skin Irrit. 2 - H315, Eye Dam. 1 - H318: Calculation method.

Revision comments Revised regulations.

Revision date 26/09/2022

Revision 5

Supersedes date 01/10/2017

SDS number 803

Hazard statements in full H315 Causes skin irritation.

H318 Causes serious eye damage.

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.