

SAFETY DATA SHEET

In accordance with 1907/2006 annex II 2015/830 and 1272/2008
(All references to EU regulations and directives are abbreviated into only the numeric term)

Issued 2018-01-30

Replaces issued SDS 2016-01-01

Version number 4.0

MediRox

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

1.1. Product identifier

Trade name PT Buffer MRX150PT Buffer med polybren MRX152

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

Identified uses Laboratory chemicals

1.3. Details of the supplier of the safety data sheet

Company Medirop AB
Studsvik
61182 NYKÖPING
Sweden
Telephone +46(0)155 45 44 10
E-mail info@medirop.se

1.4. Emergency telephone number

Acute cases: Call 112, request poison information.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Upon assessment, this mixture is not classified as hazardous according to 1272/2008.

2.2. Label elements

Hazard pictogram Not applicable
Signal word Not applicable
Hazard statement Not applicable

2.3. Other hazards

This product does not contain any substances that are assessed to be a PBT or a vPvB

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Note that the table shows known hazards of the ingredients in pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

| Constituent | Classification | Concentration |
|--|--|---------------|
| HEPES FREE ACID | | |
| CAS No: 7365-45-9 EC No: 230-907-9 | | ≤0.45 % |
| tri-SODIUM CITRATE DIHYDRATE | | |
| CAS No: 6132-04-3 EC No: 200-675-3 | | ≤0.32 % |
| SODIUM AZIDE | | |
| CAS No: 26628-22-8 EC No: 247-852-1 Index No: 011-004-00-7 | Acute Tox <i>2oral</i> , Aquatic Acute 1, Aquatic Chronic 1; <i>M = I</i> ; H300, EUH032, H400, H410 | 0.03 % |

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

SECTION 4: First aid measures

4.1. Description of first aid measures

Generally

In case of concern, or if symptoms occur, call a doctor/physician.

Upon breathing in

Fresh air and rest. If symptoms persist seek medical advice.

Upon eye contact

For safety reasons, flush eyes with water; If symptoms occur, seek medical advice.

Upon skin contact

Normal washing of the skin is considered sufficient; If nevertheless symptoms do occur, contact a physician.

Remove contaminated clothes.

Upon ingestion

First rinse the mouth thoroughly with a lot of water and SPIT OUT the water. Then drink at least 1/2 liter of water. Call a doctor/physician if symptoms persists.

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

No further relevant information available.

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

Symptomatic treatment.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing agents

Extinguish with materials intended for the surrounding fire.

Unsuitable extinguishing agents

Among common extinguishing agents there are none that are overtly unsuitable.

5.2. Special hazards arising from the substance or mixture

The product is not hazardous in the flammable sense.

In case of fire, substances hazardous to health, or substances harmful in other respects, may be dispersed.

The product does not oxidise.

5.3. Advice for fire-fighters

In case of fire use a respirator mask.

Wear full protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of spillage in protected water, call the emergency services immediately, tel. 112 (in Europe).

Avoid inhalation and exposure to skin and eyes.

Keep unauthorized and unprotected people at a safe distance.

Use recommended safety equipment, see section 8.

6.2. Environmental precautions

Avoid emissions into soil, water or air.

At amounts considered in this case, the product may be released into the natural environment without serious environmental consequences. Large emissions should however be reported to the emergency services and the Environment Agency.

6.3. Methods and material for containment and cleaning up

Contaminated products should be treated as chemical waste and declared as non-hazardous goods.

Absorb the liquid with an inert absorbent, vermiculite, for example. Collect the material for disposal at a waste disposal facility.

Wash off with large quantities of water (50-100 volume parts). Dry up afterwards.

6.4. Reference to other sections

See section 8 and 13 for personal protection equipment and disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Treat the substance as potentially harmful to health.

Do not eat, drink or smoke in premises where this product is handled.

Handle in premises which have modern ventilation standards.

7.2. Conditions for safe storage, including any incompatibilities

The product should be stored in a manner which prevents hazards to health and the environment. Avoid exposure to humans and animals and do not discharge the product in a sensitive environment.

Store in a well-ventilated area, not above eye-level.

Store only in the original package.

Store in a dry place at 15 - 25 °C.

7.3. Specific end uses

See identified uses in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National limit values

SODIUM AZIDE

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 0.1 mg/m³

Short term exposure limit (STEL) 0.3 mg/m³

Note Sk

Explanations of abbreviations are given in Section 16b

DNEL

No data available.

PNEC

No data available.

8.2. Exposure controls

In terms of minimizing risks, no special attention is needed for this product besides the general obligations that follow EU directive 89/391 and national occupational legislation.

8.2.1. Appropriate engineering controls

Maintenance and service of personal protective equipment shall be included in the works plan for internal supervision. All inspections and remedial measures shall be documented.

Handle in premises with good ventilation.

Eye/face protection

Eye protection should be worn if there is any danger of direct exposure or splashing.

Skin protection

Normal working-clothes of cotton or synthetic material should be adequate. Clothing contaminated with this product should be washed immediately; avoid contact with the skin.

Protective gloves are normally not needed due to the properties of this product, but may be necessary for other reasons, e.g. mechanical risks, temperature conditions or microbiological risks.

Respiratory protection

Protective breathing equipment should only be required in extreme work-situations. Consult the manufacturer if this is the case.

Dust filter IIB (P2) may be required.

8.2.3. Environmental exposure controls

For limitation of environmental exposure, see Section 12.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|-----------------------------------|
| a) Appearance | Form: liquid. Colour: colourless. |
| b) Odour | scentless |
| c) Odour threshold | Not indicated |
| d) pH | 7.3 |
| e) Melting point/freezing point | Not indicated |
| f) Initial boiling point and boiling range | Not indicated |
| g) Flash point | Not indicated |
| h) Evaporation rate | Not indicated |
| i) Flammability (solid, gas) | Not applicable |
| j) Upper/lower flammability or explosive limits | Not indicated |
| k) Vapour pressure | Not indicated |
| l) Vapour density | Not indicated |
| m) Relative density | Not indicated |
| n) Solubility | Not indicated |
| o) Partition coefficient: n-octanol/water | Not applicable |
| p) Auto-ignition temperature | Not indicated |

| | |
|------------------------------|----------------|
| q) Decomposition temperature | Not indicated |
| r) Viscosity | Not indicated |
| s) Explosive properties | Not applicable |
| t) Oxidising properties | Not applicable |

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions known during normal use.

10.4. Conditions to avoid

Avoid frost.

10.5. Incompatible materials

Avoid contact with oxidizers.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Not indicated.

Acute toxicity

The product is not classified as acutely toxic, but it does contain low levels of hazardous substances.

HEPES FREE ACID

LD50 rat 24h: > 2000 mg/kg Orally

tri-SODIUM CITRATE DIHYDRATE

LD50 rat 24h: 5400 mg/kg Orally

SODIUM AZIDE

LD50 rabbit 24h: 50 mg/kg Dermally

LC50 rat 4h: 0.037 mg/L Inhalation

LD50 rat 24h: 27 mg/kg Orally

Skin corrosion/irritation

The mixture is judged as a whole and is classified to be neither corrosive nor irritant to skin. Mild irritation may occur on prolonged or repeated exposure.

Serious eye damage/irritation

The mixture is judged as a whole and is classified to be neither corrosive nor irritant to the eyes. Mild irritation may occur on prolonged or repeated exposure.

Respiratory or skin sensitisation

The product is not classified as sensitising.

Germ cell mutagenicity

No mutagenic effects have been reported for the substance in this mixture.

Carcinogenicity

No carcinogenic effects have been reported for the substances in this product.

Reproductive toxicity

No toxic effects to reproduction have been reported for the substances in this mixture.

STOT-single exposure

No known hazards for occasional exposure.

STOT-repeated exposure

No known hazards for repeated exposure.

Aspiration hazard

The product is not classified as being toxic for aspiration.

SECTION 12: Ecological information

12.1. Toxicity

Prevent release on land, in water and drains.

The product contains an ecologically harmful substance but, taking into account the use of the product, its impact on the aquatic environment is expected to be extremely low.

tri-SODIUM CITRATE DIHYDRATE

LC50 Freshwater water flea (*Daphnia magna*) 48h: 5600 - 10000 mg/L

12.2. Persistence and degradability

The product degrades in the natural environment.

12.3. Bioaccumulative potential

Neither this product, nor its contents, accumulates in nature.

12.4. Mobility in soil

No information about mobility in the nature exists but there is no reason to suppose the product to be ecologically harmful because of this.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Other adverse effects

This product degrades rapidly but large emission within a short period of time may be harmful to the local environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste handling of the product

Avoid discharge of undiluted product into sewers.

This product is not usually recycled.

The product is not classified as hazardous waste.

Also take local regulations for dealing with waste into account.

SECTION 14: Transport information

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

14.1. UN number

Not classified as dangerous goods

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

14.8 Other transport information

Not applicable

SECTION 15: Regulatory information

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

Not indicated.

15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: Other information

16a. Indication of where changes have been made to the previous version of the safety data sheet

Revisions of this document

Earlier versions

2016-01-01 Changes in section(s) 4, 5, 6, 7, 8, 10, 11, 12, 13.

16b. Legend to abbreviations and acronyms used in the safety data sheet

Full texts for Hazard Class and Category Code mentioned in section 3

Acute Tox 2 oral Acute toxicity (Category 2 oral)

Aquatic Acute 1 Very toxic to aquatic life (Category Acute 1)

Aquatic Chronic 1; *M = 1* Very toxic to aquatic life with long lasting effects to aquatic environments (Category Chronic 1)

Explanations of the abbreviations in Section 8

United Kingdom

Sk Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity

Explanations of the abbreviations in Section 14

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

IMDG International Maritime Dangerous Goods Code

ICAO International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)

IATA The International Air Transport Association

16c. Key literature references and sources for data

Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2018-01-30.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

- 1907/2006 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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
- 2015/830 COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- 1272/2008 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- EH40/2005 EH40/2005 Workplace exposure limits
- 89/391 COUNCIL DIRECTIVE (89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work
- 1907/2006 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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I, where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI.

16e. List of relevant hazard statements and/or precautionary statements

Full texts for hazard statements mentioned in section 3

H300 Fatal if swallowed

EUH032 Contact with acids liberates very toxic gas

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment

Warning for misuse

This product is not expected to cause severe harm to humans or the environment. However the manufacturer, the distributor or the supplier cannot be responsible for unusual or criminal use of the product.

Other relevant information

Editorial information



This material safety data sheet has been prepared and checked by KemRisk®, KemRisk Sweden AB, Platensgatan 8, SE-582 20 Linköping, Sweden, www.kemrisk.se