Pathisol All Purpose Cleaner - Safety Data Sheet Tutum Health Ltd Prepared in accordance with Annex II of the REACH Regulation (EC) 1907/2006, Regulation (EC) 1272/2008 and Regulation (EU) 830/2015 Date of Issue: November 2020



SECTION 1.

1.1 Product identifier

Product name: Pathisol All Purpose Cleaner

1.2 Relevant identified uses of the substance or mixture and uses advised against: Relevant identified use: For use as a surface cleaning agent Uses advised against: No specific uses advised against

1.3 Details of the supplier of the Safety Data Sheets

Supplier:

Tutum Health Ltd University Hospital of Hartlepool Holdforth Road Hartlepool TS24 9AH

Phone: 0808 164 2800

Responsible person: b.burles@pathisol.com www.pathisol.com

Availability: 24 hours

1.4 Emergency telephone number

England, Scotland and Wales NHS 111/NHS 24: 111 Northern Ireland: Contact your local GP (or "Out of hours Service")

SECTION 2 Hazards Identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP/GHS) Not classified

2.2 Label Elements

Labelling according to Regulation (EC) 1272/2008 (CLP/GHS) Pictograms: None Signal Word: None

Hazard Statements: None

Precautionary Statements: P102: Keep out of reach of children

2.3 **Other Hazards** Not applicable.

SECTION 3 Composition/information on ingredients



3.1 Substance: Not Applicable

3.2 Mixture

Chemical Name (CA)	Common Name	CAS Number	EC Number	(w/w%)	Classification according to Regulation (EC) 1272/2008
Sodium hydroxide	Caustic soda	1310-73- 2	1310-73- 2	0.1%	Skin Corr. 1A H314 (Eye Irrit. 2; H319: 0.5 % ≤ C < 2 % Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0.5 % ≤ C < 2 %)
Hydrogen	Hydrogen	1333-74- 0	215-605- 7	0.04 w/w%	Press. Gas Flam. Gas 1 H220

SECTION 4 First Aid Measures

4.1 **Description of First Aid Measures**

General Notes:

Pathisol All Purpose Cleaner has no known cytotoxic effects on human cells, so under normal conditions, it is unlikely to cause harm.

Inhalation: It should not cause any problems if inhaled, but move away from product if breathing problems develop, and if they continue, seek medical help.

Skin Contact: Non-irritating on skin. Wash affected area with water.

Eye Contact: Non-irritating. As a precaution, after contact with eyes, flush eyes with water if discomfort occurs.

Ingestion: If accidently swallowed, drink a glass of water.

Occupational Exposure Limits: Refer to Section 8.

No known health hazards or medical conditions generally recognised as being aggravated by product.

Emergency antidote: None other than water.

4.2 Most important symptoms and effects, both acute and delayed

None known

4.3 Indication of any immediate medical attention and special treatment needed

None needed

SECTION 5 Fire-fighting measures

5.1 Suitable extinguishable media



Product is non flammable and not explosive. Use fire extinguishing media appropriate for surrounding materials

5.2 Special Hazards arising from the substance or mixture

There are no fire or explosion hazards associated with this product

5.3 Advice for firefighters

No specific fire-fighting procedures. Use fire extinguishing methods suitable to surrounding conditions.

SECTION 6 Accidental Release Measures

6.1 **Personal precautions, protective equipment and emergency procedures**

6.1.1 For non-emergency personnel

No personal, protective equipment required under normal conditions, but wearing gloves is always sensible.

6.1.2 For Emergency Responders

6.1.2.1 Ventilation: Open air or good room ventilation is normally adequate for the safe use of the product.

6.1.2.2 Respiratory Protection: Spraying applications may require the worker to wear suitable respiratory.

6.1.2.3 Eye protection: Although the product is not irritating on the eyes, good manufacturing and laboratory practices recommend the use of chemical safety goggles for all applications involving chemical handling

6.1.2.4 Protective Clothing: the product causes no harm when in contact with the skin. However, good manufacturing and laboratory practices recommend that gloves be worn when handling chemicals. The gloves should be chemically impervious such as those made of rubber or neoprene.

6.2 Environmental Precautions

Local environmental regulatory requirements should be followed. Most authorities allow such low concentrations to be sent to open sewers. Spills can be washed to drains and sewers with plenty of water.

6.3 Methods of Material Containment and cleaning up

Mopping up spills into a bucket or use an inert absorbent material (sand) and then subsequently dispose what is collected via drains, if possible.

6.3.1 For containment

Collect in a suitable water proof container such as a bucket

6.3.2 For cleaning up

Clean all objects used and dispose of waste as advised, observing local environmental regulations

6.3.3 Other information

None

6.4 **Reference to other information**

Personal protection: wear gloves (see 6.1.2.4)

SECTION 7 Handling and Storage

7.1 **Precautions for safe handling**



- 7.1.1 Protective measures:
 - Close container tightly after removal. Wear gloves.
- 7.1.2 Measures to prevent fire:

The product is non flammable. No special fire protection measures are necessary7.1.3 Measures to prevent aerosol and dust generation:

- Use hand pump spray bottles or hand held sprayers responsibly where and as advised so that aerosol generation is managed as intended. Normal room ventilation is adequate. It is wise to avoid wetting exposed electrical parts. When the product dries, it leaves no dust.
- 7.1.4 Measures to protect the environment:
- None needed as the product is not damaging to the environmentAdvice on general occupational hygiene
- Do not eat or drink when using the product, wear gloves and apply the product to those areas intended for cleaning. No need to over wet any area being cleaned. A covering is all that is required.

7.2 Conditions for safe storage, including any incompatibilities

- 7.2.1 Technical measures and storage conditions:
- Store in a cool and dark place.
- 7.2.2 Requirements for storage rooms and vessels: Store only in labelled clean plastic bottles stamped with the most recent filling date. Do not store in a glass bottle. Never risk mixing the product. Bottles can be re-filled with the same product once emptied. Bottles must be emptied before refilling with fresh product. Use within 6 months of the filling date.
- 7.2.3 Further information on storage conditions: Keep bottles in a cool, dark, dry place as instructed on bottle labels
- 7.3 **Specific end use(s)**

Observe instructions for use

SECTION 8 Exposure Controls/Personal Protections

8.1 Control parameters Sodium Hydroxide (CAS No. 1310-73-2)

UK Limit value – short term mg/m ³	
2	

No long term limit available for the UK.

Do not eat or drink when using the product and handle in accordance with good industrial hygiene and safety practice

- 8.2 Exposure controls There are no other exposure limits or measures recommended for the products
- 8.2.1 Appropriate engineering controls Normal room ventilation is adequate to manage due to spray applications of the product.
- 8.2.2 Personal protective equipment
- 8.2.2.1 Eye and face protection: None required, but goggles are always a good idea.
- 8.2.2.2 Skin protection: Chemical resistant gloves
- 8.2.2.3 Respiratory protection: None required
- 8.2.2.4 Thermal hazards: None known
- 8.2.3 Environmental exposure controls



No specific measures. The product is safe to release to drains.

SECTION 9 Physical and Chemical Properties

Property		
Appearance	Homogeneous Clear liquid	
Odour	No odour	
Odour threshold	Not available	
рН	≤ 12	
Melting point/Freezing point	0°C	
Boiling point	100°C	
Flash point	> 93 °C (non flammable)	
Evaporation rate	Comparable to water	
Flammability	Not flammable	
Upper lower flammability/explosive limits	Not flammable or explosive	
Vapour pressure	Not available	
Vapour density (Air =1)	Similar to water	
Relative density	Similar to Water	
Solubility in water	Complete, same as water	
Solubility in organic solvents	Not available	
Partition coefficient (n-octanol/water)	Not applicable	
Auto-ignition temperature	Does not auto-ignite	
Decomposition temperature	Not available	
Viscosity	Similar to water	
Explosive properties	Not explosive	
Reducing properties	Slightly reducing	
Oxidation Reduction Potential:	ORP=-900±100mV	

SECTION 10 Stability and Reactivity

10.1 Reactivity

Due to dilution, like water, it is a not very reactive. No specific test data.

10.2 Chemical Stability

Pathisol All Purpose Cleaner is an aqueous solution containing metastable reductants which lose chemical reactivity immediately on encountering reactants or during approximately 7 - 14 days storage when the ORP will decline from approximately -900mV to near 0 mV.

10.3 **Possibility of hazardous reactions**

No hazardous reactions known when used for its intended purposes.

10.4 **Conditions to avoid**

Avoid contact of Pathisol All Purpose Cleaner with acids or exposed metals for long periods.

10.5 **Incompatible materials**

Pathisol All Purpose Cleaner, like water, is reactive with acid solutions.

10.6 Hazardous decomposition products

Pathisol All Purpose Cleaner breaks down progressively, and deactivates by so doing, into its original components: water, Sodium chloride, 500ppm, and Sodium hydroxide at 800-1000 ppm which was formed during the electrochemical activation process.



SECTION 11 Toxicological Information

11.1 Information on toxicological effects

(a) Acute toxicity

- No oral toxicity known. No reports of adverse reactions after ingestion. Not classified according to Regulation (EC) No 1272/2008 (CLP Regulation)
- Acute inhalation toxicity: No inhalation toxicity known. Not classified according to Regulation (EC) No 1272/2008 (CLP Regulation)
- Acute dermal toxicity: No dermal toxicity known. Not classified according to Regulation (EC) No 1272/2008 (CLP Regulation)
 (b) Skin corrosion/irritation
- No known dermal irritation at the dilute product concentration. Nothing reported from the work force either.

Not classified according to Regulation (EC) No 1272/2008 (CLP Regulation)

(c) Eye damage/eye irritation

No eye irritation known at the product dilution. No reports of adverse reactions after exposure. Not classified according to Regulation (EC) No 1272/2008 (CLP Regulation)(d) Respiratory or skin sensitization

- None known at product dilution. No reports of adverse reactions after exposure. Not classified according to Regulation (EC) No 1272/2008 (CLP Regulation) (e) Germ Cell mutagenicity
- Not classified according to Regulation (EC) No 1272/2008 (CLP Regulation) (f) Carcinogenicity
- None known. Neither the Product nor any of the constituents into which it breaks down have been listed in the latest NTP Annual Report on Carcinogens, or has been found to be a potential carcinogen in the latest IARC Monograph or by OSHA. Not classified according to Regulation (EC) No 1272/2008 (CLP Regulation) (g) Reproductive toxicity
- No teratogenicity known. Not classified according to Regulation (EC) No 1272/2008 (CLP Regulation)
 - (h) STOT-single exposure
- Not classified according to Regulation (EC) No 1272/2008 (CLP Regulation).
 (i) STOT-repeated exposure
- Repeated exposure to skin has caused no adverse effects in the work force. Gloves are advised as part of good practise. No reports of adverse reactions after repeated exposure.
- Not classified according to Regulation (EC) No 1272/2008 (CLP Regulation).
 (j) Aspiration hazard
- There is no known evidence of damage to the respiratory organs due to aspiration. Not classified according to Regulation (EC) No 1272/2008 (CLP Regulation

SECTION 12 Ecotoxicological Information

12.1 **Toxicity**

Not classified according to Regulation (EC) No 1272/2008 (CLP Regulation). The Product presents no adverse effects on the environment and it is used in such a low dilution (0.1%) that by the time it reaches the waterways of the environment, it is



difficult to detect any. The dilution levels are even more dilute in the waters of the environment.

12.2 **Persistence and degradability**

There is no persistence of the Product in the environment because it is metastable and breaks down mostly to salt and water very readily.

12.3 **Bio-accumulative potential**

Not expected to bioaccumulate.

12.4 Mobility in soil

No information available

12.5 **Results on PBT and vPvB assessment**

The results of a chemical safety report including the results of a Persistent Bioaccumulative and Toxic (PBT) and very Persistent and very bio-accumulative (vPvB) assessment are not available.

12.6 Other adverse effects

No adverse effects reported

SECTION 13 Disposal considerations

13.1 Waste treatment methods

13.1.1 Product/Packaging disposal

Industrial use: No special disposal procedures. The packaging is in strong plastic containers, both large industrial containers down to hand held spray bottles, and all the containers are designed for repeated refilling and reuse. The empty containers should not be used for any other products. Once damaged, the plastic containers can be used for recycling.

13.1.2 Waste treatment-relevant information

Product can be emptied to drains and sewers after use without adverse effects. It can be deactivated by mixing with either water or the Pathisol disinfectant, or both. 13.1.3 Leaks and Spills

Leaks and spills can be removed in the same way as for ordinary water

13.2 **Other disposal-relevant information** Ensure compliance with EC, national and local environmental regulations when disposing of product using local drains and sewers

SECTION 14 Transport Information

14.1 UN Number

Not classified as hazardous for transport

14.2 UN proper shipping name

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Not hazardous for transport

- 14.3 **Transport hazard classes** Not hazardous for transport
- 14.4 Packaging group

Not hazardous for transport

14.5 Environmental hazards

No environmental hazards

14.6 **Special precautions for user**

None required

SECTION 15 Regulatory Information

15.1 This Safety health and environmental regulations specific for the substance

This safety data sheet has been compiled according to the requirements of Regulation (EC) No 1907/2006, Regulation (EC) 1272/2008 and Regulation (EU) 830/2015

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out

SECTION 16 Other Information

16.1 Indication of changes Date of Issue: 24th November 2020

16.2 Abbreviations/Acronyms:

CAS No: Chemical Abstracts Service Number CLP: Classification Labelling and Packaging Regulation (EC) No. 1272/2008 DNEL: Derived No-Effect Level ES: Exposure Scenario EC: European Commission PBT: Persistent, Bio-accumulative and Toxic vPvB: Very Persistent and Very Bio-accumulative

16.3 Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP] The classification of this product has been assessed in accordance with Annex I of Regulation (EC) No. 1272/2008.

16.5 Relevant H-statements and P- statements (number and full text):



H220 Extremely flammable gas H314 Causes severe skin burns and eye damage H315 Causes skin irritation H319 Causes serious eye irritation

16. 6 Training Advice:

The Product should be handled by trained personnel

16.7 Additional Information:

The above information is designed to give advice with regard to the safe handling of the storage, transport and disposal of the Pathisol All Purpose Cleaner Product named in this Safety Data Sheet. It describes exclusively the safety requirements of the Product and it is based on our present-day knowledge, according to Regulation (EC) No 1907/2006.