Product Shower Head Descaler & Sanitiser

Revision date 09 November 2023

Revision 2



Safety Data Sheet (SDS)

according to Regulation (EC) No. 1907/2006

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

1.1 Product identifier

Product name Shower Head Descaler & Sanitiser

Product no. TCD404

Other means of identification No information available.

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

Identified uses Cleaning agent.

For professional use only.

Uses advised against Any other purpose.

1.3 Details of the supplier of the safety data sheet

Supplier Kitchenmaster NI Ltd

11 Comber Road

Belfast BT8 8AN United Kind

United Kingdom Tel: 028 9081477 02890812881

sales@kitchenmaster-ni.com

1.4 Emergency telephone number

Contact person

Emergency telephone Emergency Telephone Number: 028 9081 4777 08:30 - 17:00 Monday to Thursday 08:30 -

16:30 Friday

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and chemical hazards
Human health
Environment

Not classified
Skin Corr. 1B - H314
Aquatic Chronic 3 - H412

2.2 Label elements

Contains phosphoric acid 81.5%

Didecyldimethylammonium chloride

Detergent labeling <5% non-ionic surfactants

Label in accordance with (EC) no.

1272/2008



Signal word Danger

Hazard statements H314 Causes severe skin burns and eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements Prevention

P260 Do not breathe dust/fume/ gas/mist/vapours/spray.

P280 Wear protective gloves/ protective clothing/eye protection/face protection.

Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.

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 or doctor/physician.

2.3 Other hazards

None known.

Section 3: Composition/information on ingredients

3.1 Substance

Not applicable.

3.2 Mixtures

Name	Product identifier	Regulation (EC) No 1272/2008	%
phosphoric acid 81.5%	CAS-No.: 7664-38-2 EC No.: 231-633-2	Skin Corr. 1B - H314	15-25%
Didecyldimethylammonium chloride	EC No.: 230-525-2	Acute Tox 3 - H301, Skin Corr. 1B - H314, Eye Dam. 1 - H318, STOT SE 3 - H336, Flam. Liq 3- H226, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	0.1-0.9%
propan-2-ol	CAS-No.: 67-63-0	Eye Irrit.2A - H319, Flam. Liq 2- H225, STOT SE 3 - H336	0.1-0.9%

The full text for all hazard statements are displayed in section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

Orthophosphoric acid: Specific Concentration Limits = H314 Skin Corr. 1B >= 25; H315

Skin Irrit. 2 >= 10 - < 25; H319 Eye Irrit. 2 >= 10 - < 25. Didecyldimethylammonium chloride : M Factor acute = 10.

Section 4: First aid measures

4.1 Description of first aid measures

General information Provide general first aid, rest, warmth and fresh air. As a general rule, in case of doubt or if

symptoms persist, always call a doctor. Seek medical attention for all burns and eye injuries, regardless how minor they may seem. First aid personnel must be aware of own risk during

rescue.

Inhalation Remove person to fresh air and keep comfortable for breathing. If not breathing, give

 $artificial\ respiration.\ If\ breathing\ is\ difficult,\ give\ oxygen.\ Seek\ medical\ attention.$

Ingestion If this product is ingested, remove victim immediately from source of exposure. Rinse mouth

thoroughly. Do not induce vomiting. Provide fresh air, warmth and rest. Get medical

attention. Never give anything by mouth to an unconscious person.

Skin contact Remove victim immediately from source of exposure. Wash the skin immediately with water.

Remove contaminated clothing, shoes and jewelry and wash before reuse. Get medical

attention if symptoms persist.

Eye contact Do not rub eye. Avoid contaminating unaffected eye. Remove contact lenses if present and

easy to do so. If this product contacts the eyes, gently flush eyes with water for at least fifteen (15) minutes, lifting the upper and lower eyelids occasionally. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

Inhalation May cause respiratory irritation.

Ingestion Ingestion can cause pain and irritation or burns of the mouth, throat, oesophagus and

 $gastroint estinal\ tract.$

Skin contact Corrosive! Can cause redness, pain, and severe skin burns.

Eve contact

Corneal burns may occur. May cause permanent damage.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to the physician Treat symptomatically.

Section 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media Unsuitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials. Water spray or CO2.

High volume water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products When heated, toxic and corrosive vapours/gases may be formed. Carbon dioxide and oxides

of phosphorus.

Unusual fire & explosion hazards

Specific hazards

Acid will react with active metals to produce flammable hydrogen.

In the event of damage to packaging, floors may become slippery, avoid falls. Do not allow run-off from fire fighting to enter drains or water courses. Water used for fire extinguishing, which has been in contact with the product, may be corrosive. Containers can burst violently

when heated, due to excess pressure build-up.

5.3 Advice for firefighters

Special fire fighting procedures If possible, fight fire from protected position. Avoid breathing fire vapours. Ventilate closed

spaces before entering them. Containers close to fire should be removed immediately or

cooled with water if safe to do so.

Protective equipment for firefighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard

EN 469 will provide a basic level of protection for chemical incidents.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Wear protective clothing as described in Section 8 of this safety data sheet. Provide

> adequate ventilation. Eliminate all sources of ignition. Avoid inhalation of vapours and contact with skin and eyes. In case of inadequate ventilation, use respiratory protection. Do not touch or walk through spilled material. If necessary evacuate surrounding areas.

Follow safe handling advice and personal protective equipment recommendations for normal For emergency responders

use of product.

6.2 Environmental precautions

Environmental precautions Do not discharge onto the ground or into water courses. Spillages or uncontrolled discharges

into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other

appropriate regulatory body

6.3 Methods and material for containment and cleaning up

Spill clean up methods Stop leak if possible without risk. DO NOT touch spilled material! When dealing with a

> spillage, wear necessary protective equipment. Ventilate and evacuate the area. Eliminate all ignition sources. Cover drains. Absorb spillage with non-combustible, absorbent material -

For small spillage dilute with water and neutralise cautiously with soda ash and/or lime and recover for disposal. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. Wash thoroughly after dealing with a spillage. Floors may become slippery, avoid falls. Use non-

metallic tools/containers for clean up.

6.4 Reference to other sections

Reference to other sections See section 1 for emergency contact. For personal protection, see section 8. For waste

disposal, see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handling

Read and follow manufacturer's recommendations. Use proper personal protection when handling (refer to Section 8). Do not handle broken packages without protective equipment. Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Do not eat, drink or smoke when using the product. Wash thoroughly after handling. Provide good ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Storage precautions Keep upright, locked up and out of reach of children. Keep the product in its original

container. Store in cool dry areas away from direct sunlight or sources of ignition. Avoid

contact with metals. Keep away from incompatible materials (see section 10).

Storage class Corrosive storage.

7.3 Specific end use(s)

Specific end use(s)The identified uses for this product are detailed in Section 1.2. **Usage description**Use only according to directions. Replace and tighten cap after use.

Section 8: Exposure controls/Personal protection

8.1 Control parameters

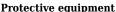
Component	STD	TWA (8 Hrs)	STEL (1	15mins)	Notes
phosphoric acid 81.5%	OEL		1 mg/m ³		2 mg/m ³	IOELV
phosphoric acid 81.5%	WEL		1 mg/m^3		2 mg/m ³	
propan-2-ol	OEL	200 ppm		400 ppm		Sk
propan-2-ol	WEL	400 ppm	999 mg/m ³	500 ppm	1250 mg/m ³	

Ingredient comments

Ireland, Occupational Exposure Limits 2021.

 $WEL\ -\ Workplace\ Exposure\ Limits\ -\ EH40/2005\ Workplace\ exposure\ limits.$

8.2 Exposure Controls











Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/145/143/149. The specific respirator selected must be based on contamination levels found in the work place.

Where risk assessment shows air-purifying respirators are appropriate a full face respirator conforming to EN143 should be used, and suitable respirator cartridges as a backup to engineering controls. ABEK (EN 14387). Use a filter suitable for organic acids. Consult manufacturer for specific advice.

Hand protection

Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374) is recommended. (EU Directive 89/686/EEC). Gloves must be inspected prior to use. Suggested material: Neoprene. Breakthrough time: >480 minutes. Layer thickness: 0.5 mm. Consult manufacturer for advice.

Selection of the glove material depends on consideration of the penetration times, rates of diffusion and degradation, and concentration specific to the workplace. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Eve protection

Wear safety goggles or face shield to prevent any possibility of eye contact. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU).

Other protection Personal protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist before handing this product. Wear appropriate clothing to prevent any possibility of skin contact: anti-acid suit and boots. The selected clothing must satisfy the European norm standard EN 943.

Observe normal hygiene standards. Wash promptly if skin becomes contaminated. When

using do not eat, drink or smoke. Wash hands after use.

Process conditions Ensure that eye flushing systems and safety showers are located close by in the work place.

Section 9: Physical and chemical properties

Hygiene measures

9.1 Information on basic physical and chemical properties

Appearance Liquid.

Colour Clear. Dark green-blue.

Odour Characteristic.

Odour threshold - lower No information available as testing has not been completed.

Odour threshold - upperNo information available as testing has not been completed.

pH-Value, Conc. Solution 1 - 2

pH-Value, Diluted solution Not applicable as the product is a concentrated solution.

Melting point No information available as testing has not been completed.

Initial boiling point and boiling

ange

No information available as testing has not been completed.

Flash point Not applicable as the product is not flammable.

Evaporation rate No information available as testing has not been completed.

Flammability state Not applicable as the product is not flammable.

Flammability limit - lower(%) Not applicable as the product is not flammable.

Flammability limit - upper(%) Not applicable as the product is not flammable.

Vapour pressure No information available as testing has not been completed.

Vapour density (air=1) No information available as testing has not been completed.

 $\label{eq:relative density} \textbf{Relative density} \hspace{1cm} 1.10 - 1.20 \text{ kg/l (at } 20 \text{°C)}$

Bulk density Not applicable as the product is a liquid.

Soluble in water.

Decomposition temperature No information available as testing has not been completed.

Partition coefficient; n-

Octanol/Water

Not applicable as the product is a mixture.

Auto ignition temperature (°C) Not applicable as the product is not flammable.

Viscosity No information available as testing has not been completed.

Explosive properties Not classified as explosive.

Oxidising properties The product does not meet the criteria to be classified as oxidising.

9.2 Other information

Molecular weight Not applicable as the product is a mixture.

Volatile organic compound No information available as testing has not been completed.

Other information None noted.

Section 10: Stability and reactivity

10.1 Reactivity

Reactivity Reactions may occur with strong oxidizing agents, strong caustic materials and metals. This

solution can react with certain metals, such as aluminum, to generate flammable hydrogen

gas.

10.2 Chemical stability

Stability Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions

Hazardous reactions Avoid strong oxidizers. Reaction with strong bases. Attacks metals liberating flammable

Hydrogen gas.

Hazardous polymerisationUnknownPolymerisation descriptionUnknown

10.4 Conditions to Avoid

Conditions to avoid Heat, sparks, open flames, temperature extremes and direct sunlight. Water, moisture.

10.5 Incompatible materials

Materials to avoid Keep away from strong reducing agents. Metals. Bases. Do not mix with other chemicals

unless listed on directions. Hazardous reaction in aqueous solution may occur with chlorine,

hypochlorous acid, hypochlorites, cyanides or sulfides.

10.6 Hazardous decomposition products

Hazardous decomposition products When heated, vapours/gases hazardous to health may be formed. Oxides of carbon, oxides of

phosphorus.

Section 11: Toxicological information

11.1 Information on hazard classses as defined in Regulation (EC) No. 1272/2008

Toxicological information No toxicological information for the overall finished product.

Acute toxicity (Oral LD50)

Acute toxicity (Dermal LD50)

Acute toxicity (Inhalation LD50)

No information available as testing has not been completed.

No information available as testing has not been completed.

Serious eye damage/irritation Causes serious eye damage.

Skin corrosion/irritation The product is classified as a skin corrosion/irritation hazard.

Respiratory sensitisationThe product is not classified as a respiratory hazard.

Skin sensitisation
The product is not classified as a skin sensitisation hazard.

Germ cell mutagenicity The product is not classified as a mutagen.

Carcinogenicity The product is not classified as a carcinogen hazard.

Specific target organ toxicity - Single exposure:

STOT - Single exposureThe product is not classified as a single exposure specific target organ toxin.

 $\label{lem:specific target organ toxicity - Repeated exposure:} \\$

STOT - Repeated exposure The product is not classified as a repeat exposure specific target organ toxin.

Inhalation May cause respiratory irritation.

Ingestion Ingestion can cause pain and irritation or burns of the mouth, throat, oesophagus and

gastrointestinal tract.

Skin contactCorrosive! Can cause redness, pain, and severe skin burns.Eye contactCorneal burns may occur. May cause permanent damage.

Waste management When handling waste, consideration should be made to the safety precautions applying to

handling of the product.

Routes of entry Eyes, skin, ingestion or inhalation.

Target organs Eyes, skin, digestive system, respiratory system.

Aspiration hazards: The product is not classified as an aspiration hazard. **Reproductive toxicity:** The product is not classified as a reproductive hazard.

Name	LD50 oral	LD50 dermal	LD50 inhalation
phosphoric acid 81.5%	1530.00mg/kg Rat		

11.2 Information on other hazards

Information on other hazards None known.

Section 12: Ecological information

12.1 Toxicity

Acute toxicity - Fish

Acute toxicity - Aquatic invertebrates

No information available as testing has not been completed.

Acute toxicity - Aquatic plants

Acute toxicity - Microorganisms

Chronic toxicity - Fish

Chronic toxicity - Aquatic

No information available as testing has not been completed.

No information available as testing has not been completed.

No information available as testing has not been completed.

No information available as testing has not been completed.

No information available as testing has not been completed.

invertebrates

Chronic toxicity - Aquatic plantsNo information available as testing has not been completed.
No information available as testing has not been completed.

Ecotoxicity - Microorganisms

The product contains a substance which is harmful to aquatic life with long lasting effects. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic $\dot{}$

organisms.

12.2 Persistence and degradability

Eco toxilogical information

DegradabilityThe degradability of the product has not been stated.Biological oxygen demandNo information available as testing has not been completed.Chemical oxygen demandNo information available as testing has not been completed.

12.3 Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Bioaccumulation factorPartition coefficient; nNo information available as testing has not been completed.
Not applicable as the product is a mixture.

Octanol/Water

12.4 Mobility in soil

Mobility Soluble in water.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment The product does not contain any PBT or vPvB Substances.

12.6 Endocrine disrupting properties

Endocrine disrupting propertiesThe product does not contain any substances with endocrine disrupting properties at a

concentration above or equal to 0.1%.

12.7 Other adverse effects

Other adverse effects None known.

Section 13: Disposal considerations

Waste management When handling waste, consideration should be made to the safety precautions applying to

handling of the product.

13.1 Waste treatment methods

Disposal methods

Dispose of waste and residues in accordance with local authority requirements. For waste disposal, use a licensed industrial waste disposal agent.

Section 14: Transport information

14.1 UN number or ID number

 UN no. (ADR)
 UN1760

 UN no. (IMDG)
 UN1760

 UN no. (IATA)
 UN1760

14.2 UN proper shipping name

ADR proper shipping name IMDG proper shipping name IATA proper shipping name CORROSIVE LIQUID, N.O.S. (phosphoric acid) CORROSIVE LIQUID, N.O.S. (phosphoric acid) CORROSIVE LIQUID N.O.S. (phosphoric acid)

14.3 Transport hazard class(es)

ADR class 8
IMDG class 8
IATA class 8

Transport labels



14.4 Packing group

ADR/RID/ADN packing group III
IMDG packing group III
IATA packing group III

14.5 Environmental hazards

ADR No IMDG No IATA No

14.6 Special precautions for user

EMS F-A, S-B
Emergency action code A3 A803
Hazard no. (ADR) 80
Tunnel restriction code (E)

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Section 15: Regulatory information

$\underline{\textbf{15.1 Safety, health and environmental regulations/Legislation specific for the substance or mixture}$

EU legislation

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 with amendments. The UN Globally Harmonized System (GHS) Safety Data Sheet format (Annex IV) is implemented as Annex II of REACH EU No 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)

(Amendment etc.) (EU Exit) Regulations 2019.

Approved code of practice Workplace Exposure Limits Guidance Note EH40/2005.

2021 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2021) and the Safety, Health and Welfare at Work (Carcinogens)

Regulations (2001-2019)

15.2 Chemical safety assessment

Chemical safety assessment No chemical safety assessment has been carried out.

Section 16: Other information

General information
This Safety Data Sheet is in accordance with REACH Annex II, (EC) No 2020/878.

Revision comments
[1]Information updated. [2]Information updated. [3]Information updated.

updated. [8]Information updated. [9]Information updated. [10]Information updated.

 $[11] Information\ updated.\ [12] Information\ updated.\ [15] Information\ updated.\ This\ is\ a\ second$

issue.

Revision date 09 November 2021 **Supersedes date** 08 June 2017

Revision 2

Safety data sheet status Approved.

Hazard statements in full

H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H225 Highly flammable liquid and vapour.H319 Causes serious eye irritation.

H413 May cause long lasting harmful effects to aquatic life.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.