

Product Shower Head Descaler & Sanitiser
 Revision date 08 June 2017
 Revision 1



Safety Data Sheet (SDS)

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

1.1 Product identifier

Product name Shower Head Descaler & Sanitiser
Product no. 404
Synonyms, Trade names No information available.

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

Identified uses Descaler.
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 Kingdom
 Tel: 028 9081477 02890812881
 sales@kitchenmaster-ni.com

Contact person

1.4 Emergency telephone number

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 Not classified
 Human health Skin Corr. 1B - H314, Eye Dam. 1 - H318
 Environment Not classified

2.2 Label elements

Contains Phosphoric acid

Label in accordance with (EC) no. 1272/2008



Signal word Danger

Hazard statements H314 Causes severe skin burns and eye damage.

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/identification of ingredients

3.1 Substance

Not applicable.

3.2 Mixtures

Name	Product identifier	Reg. EU 1272/2008	%
Phosphoric acid	CAS-No.: 7664-38-2 EC No.: 231-633-2	Skin Corr. 1B - H314	10-30%
propan-2-ol isopropyl alcohol isopropanol	CAS-No.: 67-63-0 EC No.: 200-661-7	Flam. Liq 2- H225, Eye Irrit.2A - H319, STOT SE 3 - H336	0-1%

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.

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. Remove contaminated clothing, shoes and jewelry and wash before reuse. Wash the skin immediately with water. 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 gastrointestinal tract.
Skin contact	Corrosive! Can cause redness, pain, and severe skin burns.
Eye 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.
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Section 5: Fire-fighting measures

5.1 Extinguishing media

Extinguishing media	Use fire-extinguishing media appropriate for surrounding materials. Water spray or CO ₂ .
Unsuitable extinguishing media	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	Acid will react with active metals to produce flammable hydrogen.
Specific hazards	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 fire-fighters (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

Personal precautions	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.
For emergency responders	Follow safe handling advice and personal protective equipment recommendations for normal 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
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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 - sand. 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.
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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.
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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. Do not use contact lenses. 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.
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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
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Storage class 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). 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 (15mins)		Notes
Phosphoric acid	WEL		1 mg/m ³		2 mg/m ³	
Phosphoric acid	OEL		1 mg/m ³		2 mg/m ³	
propan-2-ol isopropyl alcohol isopropanol	WEL	400 ppm	999 mg/m ³	500 ppm	1250 mg/m ³	
propan-2-ol isopropyl alcohol isopropanol	OEL	200 ppm		400 ppm		

Ingredient comments OEL - Occupational Exposure Limit - Ireland, Occupational Exposure Limits 2016.
WEL - Workplace Exposure Limits - EH40/2005 Workplace exposure limits.

8.2 Exposure Controls

Protective equipment



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.

Eye 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

The selected clothing must satisfy the European norm standard EN 943. 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 handling this product.

Hygiene measures

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

9.1 Information on basic physical and chemical properties

Appearance	Non-viscous liquid.
Colour	Clear. Dark green-blue.
Odour	No odour information available.
Odour threshold - lower	No information available.
Odour threshold - upper	No information available.
pH-Value, Conc. Solution	1.00
pH-Value, Diluted solution	No information available.
Melting point	No information available.
Initial boiling point and boiling range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability state	No information available.
Flammability limit - lower(%)	No information available.
Flammability limit - upper(%)	No information available.
Vapour pressure	No information available.
Vapour density (air=1)	No information available.
Relative density	1.104g/cm ³ @ 20.00 °C
Bulk density	No information available.
Solubility	Soluble in water. Aqueous solutions are acidic.
Decomposition temperature	No information available.
Partition coefficient; n-Octanol/Water	No information available.
Auto ignition temperature (°C)	No information available.
Viscosity	No information available.
Explosive properties	Not classified as explosive.
Oxidising properties	No information available.

9.2 Other information

Molecular weight	No information available.
Volatile organic compound	No information available.
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.
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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 polymerisation Will not polymerise.
Polymerisation description Not applicable.

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 toxicological effects**

Toxicological information No toxicological information for the overall finished product.

Acute toxicity (Oral LD50) No information available.
Acute toxicity (Dermal LD50) No information available.
Acute toxicity (Inhalation LD50) No information available.

Serious eye damage/irritation Causes serious eye irritation.

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

Respiratory sensitisation No information available.
Skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Specific target organ toxicity - Single exposure:
STOT - Single exposure No information available.
Specific target organ toxicity - Repeated exposure:
STOT - Repeated exposure No information available.

Inhalation May cause respiratory irritation.
Ingestion Ingestion can cause pain and irritation or burns of the mouth, throat, oesophagus and gastrointestinal tract.

Skin contact Corrosive! Can cause redness, pain, and severe skin burns.
Eye contact Corneal 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 No information available.
Target organs Eyes, skin, digestive system, respiratory system.

Aspiration hazards: No information available.
Reproductive toxicity: No information available.

Name	LD50 oral	LD50 dermal	LD50 inhalation
Phosphoric acid	1530.00mg/kg Rat	2740.00mg/kg Rabbit	
propan-2-ol isopropyl alcohol isopropanol	4570.00mg/kg Rat	13400.00mg/kg Rabbit	30.00mg/l (vapours) Rat 4 Hours

Section 12: Ecological information

12.1 Toxicity

Acute toxicity - Fish	PHOSPHORIC ACID (CAS: 7664-38-2) Lethal pH: pH 3. (Lepomis macrochirus (Bluegill), 96 hours.) REACH dossier information.
Acute toxicity - Aquatic invertebrates	PHOSPHORIC ACID (CAS: 7664-38-2) EC50: > 100 mg/l (Daphnia magna, 48 hours.) NOEC: 56 mg/l (Daphnia magna, 48 hours.) REACH dossier information.
Acute toxicity - Aquatic plants	PHOSPHORIC ACID (CAS: 7664-38-2) EC50: > 100 mg/l. (Desmodesmus subspicatus, 72 hours.) NOEC: 100 mg/l (Desmodesmus subspicatus, 72 hours.) REACH dossier information.
Acute toxicity - Microorganisms	No information available.
Chronic toxicity - Fish	No information available.
Chronic toxicity - Aquatic invertebrates	No information available.
Chronic toxicity - Aquatic plants	No information available.
Chronic toxicity - Microorganisms	No information available.
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.
Eco toxicological information	No ecological toxicity available on the overall finished product.

12.2 Persistence and degradability

Degradability	The degradability of the product has not been stated.
Biological oxygen demand	No information available.
Chemical oxygen demand	No information available.

12.3 Bioaccumulative potential

Bioaccumulative potential	No data available on bioaccumulation.
Bioaccumulation factor	No information available.
Partition coefficient; n-Octanol/Water	No information available.

12.4 Mobility in soil

Mobility	No information available.
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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 Other adverse effects

Other adverse effects	None known.
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Name	Acute toxicity (Fish)	Acute toxicity (Aquatic invertebrates)	Acute toxicity (Aquatic plants)
sodium 3,3'-(9,10-dioxoanthracene-1,4-diyldiimino)bis(2-4,6-trimethylbenzenesulphonate)	LC50 75.00mg/l Onchorhynchus mykiss (Rainbow Trout)		

Section 13: Disposal considerations

Waste management	When handling waste, consideration should be made to the safety precautions applying to handling of the product.
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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.
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Section 14: Transport information**14.1 UN number**

UN no. (ADR)	UN1760
UN no. (IMDG)	UN1760
UN no. (IATA)	UN1760

14.2 UN proper shipping name

ADR proper shipping name	CORROSIVE LIQUID, N.O.S. (phosphoric acid)
IMDG proper shipping name	CORROSIVE LIQUID, N.O.S. (phosphoric acid)
IATA proper shipping name	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
Hazard no. (ADR)	80
Tunnel restriction code	(E)

14.7 Transport in bulk according to annex II of MARPOL73/78 and the IBC code

Not applicable.

Section 15: Regulatory information**15.1 Safety, health and environmental regulations/Legislation specific for the substance or mixture**

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 453/2010 of 20th May 2010 amending regulation (EC) No 1907/2006.
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Approved code of practice	Workplace Exposure Limits Guidance Note EH40/2005.
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2016 Code of Practice for the Chemical Agents Regulations in accordance with section 60 of the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005).

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 Regulation (EC) No 453/2010.
Revision comments	This is a first issue.
Revision date	08 June 2017
Revision	1
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.
H302	Harmful if swallowed.
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

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.