SAFETY DATA SHEET APPLIANCE DESCALER

Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name APPLIANCE DESCALER

Product number 500-100-0005

Internal identification D8028

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

Detergent.

Identified uses

1.3. Details of the supplier of the safety data sheet

health and/or the environment)

National emergency telephoneIn case of a medical emergency following exposure to a chemical call NHS Direct in Englandnumberor Wales 0845 46 47 or NHS 24 in Scotland08454 24 24 24

SECTION 2: Hazards identification			
2.1. Classification of the subs	2.1. Classification of the substance or mixture		
Classification (EC 1272/2008	3)		
Physical hazards	Not Classified		
Health hazards	Eye Irrit. 2 - H319		
Environmental hazards	Not Classified		
2.2. Label elements			
Pictogram			
Signal word	Warning		
Hazard statements	H319 Causes serious eye irritation.		

Precautionary statements	 P102 Keep out of reach of children. P264 Wash contaminated skin thoroughly after handling. P280 Wear protective gloves/ protective clothing/ eye protection/ 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. P337+P313 If eye irritation persists: Get medical advice/ attention. P501 Dispose of contents/ container in accordance with local regulations.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

3.2. Mixtures		
CITRIC ACID ANHYDRO	DUS	10-30%
CAS number: 77-92-9	EC number: 201-069-1	REACH registration number: 01- 2119457026-42-XXXX
Classification Eye Irrit. 2 - H319		
The Full Text for all R-Phr	ases and Hazard Statements are Displayed in Se	ection 16.
SECTION 4: First aid mea	asures	
4.1. Description of first aid	l measures	
General information	Provide eyewash station.	
Inhalation	Move affected person to fresh air at once. I attention if any discomfort continues.	Rinse nose and mouth with water. Get medical
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.	
Skin contact	Rinse immediately with plenty of water. Remove contaminated clothing. Get medical attentio if irritation persists after washing.	
Eye contact		move any contact lenses and open eyelids wide utes. Get medical attention if symptoms are severe Data Sheet to the medical personnel.
4.2. Most important sympt	toms and effects, both acute and delayed	
General information	Provide eyewash station.	
Skin contact	Prolonged contact may cause redness, irrit	ation and dry skin.
Eye contact		rolonged or repeated exposure may cause the ness, followed by blurred vision. Corneal damage
4.3. Indication of any imm	ediate medical attention and special treatment ne	eeded
Notes for the doctor	No specific recommendations.	
SECTION 5: Firefighting r	maneuroe	

The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. Suitable extinguishing media Foam, carbon dioxide or dry powder.

Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.	
5.3. Advice for firefighters		
Protective actions during firefighting	Control run-off water by containing and keeping it out of sewers and watercourses.	
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.	
SECTION 6: Accidental releas	e measures	
6.1. Personal precautions, pro	tective equipment and emergency procedures	
Personal precautions	For personal protection, see Section 8. Treat the spilled material according to the instructions in the clean-up section. Take care as floors and other surfaces may become slippery.	
6.2. Environmental precaution	<u>s</u>	
Environmental precautions	Collect and dispose of spillage as indicated in Section 13. Do not discharge into drains or watercourses or onto the ground.	
6.3. Methods and material for containment and cleaning up		
Methods for cleaning up	Stop leak if safe to do so. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.	
6.4. Reference to other section	ns	
Reference to other sections	For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.	
SECTION 7: Handling and sto	rage	
7.1. Precautions for safe hand	ling	
Usage precautions	Provide adequate ventilation. Avoid spilling. Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid breathing vapour/spray. Do not mix with other household chemical products. Do not mix with acid.	
Advice on general occupational hygiene	Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using this product. Wash skin thoroughly after handling. Take off contaminated clothing and wash it before reuse. Use appropriate hand lotion to prevent defatting and cracking of skin.	
7.2. Conditions for safe storag	e, including any incompatibilities	
Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store at room temperature. Keep out of the reach of children. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	
7.3. Specific end use(s)		
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.	

CITRIC ACID ANHYDROUS (CAS: 77-92-9)

DNEL

Available hazard data do not support the need for a DNEL to be established for other health effects.

PNEC	- Fresh water; 0.44 mg/l - marine water; 0.044 mg/l - STP; >1000 mg/l - Sediment (Freshwater); 34.6 mg/kg - Sediment (Marinewater); 3.46 mg/kg - Soil; 33.1
8.2. Exposure controls	
Protective equipment	
Appropriate engineering controls	Provide adequate ventilation.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Rubber (natural, latex). Neoprene. Nitrile rubber. Polyethylene. To protect hands from chemicals, gloves should comply with European Standard EN374.
Other skin and body protection	Wear appropriate clothing to prevent repeated or prolonged skin contact. Use appropriate hand lotion to prevent defatting and cracking of skin.
Hygiene measures	When using do not eat, drink or smoke. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Use appropriate skin cream to prevent drying of skin.
Respiratory protection	Respiratory protection not required.
Environmental exposure controls	Avoid releasing into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties		
Appearance	Liquid.	
Colour	Colourless.	
Odour	Unperfumed.	
рН	pH (concentrated solution): 1-2	
Melting point	Not determined.	
Flash point	This product does not sustain combustion. Not determined.	
Flammability (solid, gas)	Not applicable.	
Upper/lower flammability or explosive limits	The product is not flammable.	
Vapour pressure	Not determined.	

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Relative density	1.035-1.045 @ 20°C	
Solubility(ies)	Soluble in water.	
Partition coefficient	Not determined.	
Auto-ignition temperature	Not determined.	
Decomposition Temperature	Not determined.	
Viscosity	Water ~ 1 mPa s @ 20°C	
Explosive properties	There are no chemical groups present in the product that are associated with explosive properties.	
Explosive under the influence of a flame	Not considered to be explosive.	
Oxidising properties	There are no chemical groups present in the product that are associated with oxidising properties.	
Comments	Information given is applicable to the product as supplied.	
9.2. Other information		
Other information	Not relevant.	
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.	
10.3. Possibility of hazardous	reactions	
Possibility of hazardous reactions	Not applicable.	
10.4. Conditions to avoid		
Conditions to avoid	Avoid exposure to high temperatures or direct sunlight.	
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 products	No known hazardous decomposition products.	
SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Toxicological effects	Information given is based on data of the components and of similar products.	
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 LC_{50})	Based on available data the classification criteria are not met.	
Skin corrosion/irritation Skin corrosion/irritation	Not classified. Based on available data the classification criteria are not met.	
Serious eye damage/irritation Serious eye damage/irritation	Causes serious eye irritation.	
Respiratory sensitisation Respiratory sensitisation	Not sensitising. Based on available data the classification criteria are not met.	
Skin sensitisation Skin sensitisation	Not classified. Based on available data the classification criteria are not met.	
Germ cell mutagenicity Genotoxicity - in vitro	Does not contain any substances known to be mutagenic.	
Carcinogenicity Carcinogenicity	Does not contain any substances known to be carcinogenic.	
Reproductive toxicity Reproductive toxicity - fertility	Does not contain any substances known to be toxic to reproduction.	
Specific target organ toxicity -	single exposure	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.	
Specific target organ toxicity -	repeated exposure	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.	
Aspiration hazard Aspiration hazard	Based on available data the classification criteria are not met.	
General information	This product has low toxicity.	
Ingestion	May cause irritation. Symptoms following overexposure may include the following: Stomach pain. Nausea, vomiting. Diarrhoea.	
Skin contact	Skin irritation should not occur when used as recommended. Prolonged or repeated exposure may cause the following adverse effects: Irritation. Redness. Dryness and/or cracking. Mild dermatitis, allergic skin rash.	
Eye contact	Irritating to eyes. May cause serious eye damage. Severe irritation, burning, tearing and blurred vision. Corneal damage.	
Toxicological information on ingredients.		

CITRIC ACID ANHYDROUS

Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	5,040.0
Species	Mouse
ATE oral (mg/kg)	5,040.0
Acute toxicity - dermal	

	Acute toxicity derma	I (LD₅o	2,001.0
	mg/kg)	·	
	Species		Rat
	ATE dermal (mg/kg)	I	2,001.0
SECTION 12	2: Ecological informat	tion	
Ecotoxicity		here are	e no data on the ecotoxicity of this product. Not regarded as dangerous for the ent.
12.1. Toxicit	<u>y</u>		
Toxicity			dered toxic to fish. The product may affect the acidity (pH) of water which may have s effects on aquatic organisms.
Ecological in	formation on ingredie	ents.	
			CITRIC ACID ANHYDROUS
	Acute aquatic toxicity	<u>y</u>	
	Acute toxicity - fish		LC_{50} , 48 hours: 440 and 760 mg/l, Leuciscus idus (Golden orfe)
	Acute toxicity - aqua invertebrates	tic	EC₅₀, 24 hours: 1535 mg/l, Daphnia magna
12.2. Persist	ence and degradabili	ity	
Persistence	pr Ni cc	roduct co o. 648/2 ompeten	e no data on the degradability of this product. The surfactant(s) contained in this complies(comply) with the biodegradability criteria as laid down in Regulation (EC) 2004 on detergents. Data to support this assertion are held at the disposal of the at authorities of the Member States and will be made available to them at their direct or at the request of a detergent manufacturer.
Ecological in	formation on ingredie	ents.	
			CITRIC ACID ANHYDROUS
	Persistence and degradability		The product is biodegradable.
12.3. Bioaccumulative potential			
Bioaccumula	ulative potential No data available on bioaccumulation.		
Partition coe	fficient No	ot deter	mined.
Ecological in	formation on ingredie	ents.	
			CITRIC ACID ANHYDROUS
	Bioaccumulative pot	ential	The product is not bioaccumulating.
	Partition coefficient		log Pow: -1.72 REACH dossier information.
12.4. Mobilit	y in soil		
Mobility	TI	he produ	uct is water-soluble and may spread in water systems.
Ecological in	formation on ingredie	ents.	
			CITRIC ACID ANHYDROUS

Mobility	Soluble in water.	
12.5. Results of PBT and vPv	B assessment	
Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.	
Ecological information on ingr	edients.	
	CITRIC ACID ANHYDROUS	
Results of PBT a assessment	and vPvB This substance is not classified as PBT or vPvB according to current EU criteria.	
12.6. Other adverse effects		
Other adverse effects	None known.	
Ecological information on ingr	edients.	
	CITRIC ACID ANHYDROUS	
Other adverse et	ffects Not available.	
SECTION 13: Disposal consid	derations	
13.1. Waste treatment method		
General information	Do not discharge into drains or watercourses or onto the ground.	
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Reuse or recycle products wherever possible.	
SECTION 14: Transport inform	nation	
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 nam		
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 u Not applicable.	user	

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	The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).	
EU legislation	 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) (as amended). Commission Regulation (EU) No 453/2010 of 20 May 2010. 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 (as amended). Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work (as amended). 	
	Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments. Commission Regulation (EU) No 2015/830 of 28 May 2015.	
Guidance	Workplace Exposure Limits EH40. ECHA Guidance on the Application of the CLP Criteria. ECHA Guidance on the compilation of safety data sheets. COSHH Essentials. Technical Guidance WM2: Hazardous Waste.	

15.2. Chemical safety assessment

No information available.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet Revision comments	 DNEL: Derived No Effect Level. PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. New revision number applied to comply with Commission Regulation (EU) No 2015/830 Of 28 May 2015' NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	29/01/2019
Revision	1
SDS number	21891
Hazard statements in full	H319 Causes serious eye irritation.

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.