according to Regulation (EC) No. 1907/2006

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	.01.2017		Dat	e of first issue: 07.	01.2002
SECTION 1: Identif	ication of the	substanc	ce/mixtu	re and of the co	mpany/undertaking
1.1 Product identifie			_		
Trade name		aspirmati			
1.2 Relevant identified Use of the Sub- stance/Mixture		substance Cleaning		re and uses advis	ed against
Recommended re	estrictions	Restricted	d to profe	ssional users.	
1.3 Details of the sup	oplier of the sa	fety data s	heet		
Manufacturer/ Su	ipplier	Schülke & Robert-Ko			
			, ie: +49 (0) +49 (0)40/ nuelke.coi	140/ 52100-0 / 52100318 m	
E-mail address o responsible for th SDS/Contact per	e	Applicatio +49 (0)40 ADHI@so (Schülke)/ 521 00 chuelke.co	8800	43500)
1.4 Emergency telep	hone number				
Emergency telep		UK Poiso	ons Emerg	ency number: 087	0 600 6266
	ber Emergency telephone num- : +49 (0)40/ 52100-0 ber				
SECTION 2: Hazar	ds identificati	on			
2.1 Classification of	the substance	or mixture	•		
Classification (F	REGULATION (EC) No 127	72/2008)		
Corrosive to meta Eye irritation, Cat	als, Category 1	20,110 121	H290: N	lay be corrosive to auses serious eye	
2.2 Label elements					
Labelling (REGU Hazard pictogran		No 1272/20	008)		
Signal word	:	Warning			
Hazard statemen	ts :	H290 H319		May be corrosive to Causes serious eye	

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Precautiona	ry statements	 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.

Special labelling of cortain	\sim Labelling apparding to Degulation (EC) No. 649/2004: (\sim 5.9/
Special labelling of certain	: Labelling according to Regulation (EC) No. 648/2004: (< 5 %
mixtures	non-ionic surfactants)

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

No special risks known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Solution of the following substances with harmless additives.

Hazardous components

Chemical name	Index-Number CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
Citric acid monohydrate	 5949-29-1 201-069-1	Eye Irrit. 2; H319	30 - 50

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice In case of skin contact	 Take off all contaminated clothing immediately. Wash with water and soap as a precaution. If skin irritation persists, call a physician. 	
In case of eye contact	: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If eye irritation persists, consult a specialist.	
If swallowed	: Do NOT induce vomiting. Drink water as a precaution. If symptoms persist, call a physician.	
4.2 Most important symptoms and effects, both acute and delayed		

Symptoms : Treat symptomatically.,

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	: For specialist advice physicians should contact the Poisons
	Information Service.

SECTION 5: Firefighting measures

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5.1 Extinguishi	ing media		
•	tinguishing media	:	Dry powder, Foam, Water spray jet, Carbon dioxide (CO2)
Unsuitable media	extinguishing	:	High volume water jet
5.2 Special haz	ards arising from	the	e substance or mixture
-	zards during fire-		No information available.
5.3 Advice for	firefighters		
Special pro for firefighte		:	In the event of fire, wear self-contained breathing apparatus
SECTION 6: A	Accidental releas	e n	neasures
6.1 Personal p	recautions, protec	tive	e equipment and emergency procedures
Personal p	recautions	:	Increased risk of slipping in the presence of leaked / spilled product. Use personal protective equipment.
6.2 Environme	ntal precautions		
Environme	ntal precautions	:	Avoid subsoil penetration.
6.3 Methods ar	nd material for con	tai	nment and cleaning up
Methods fo	r cleaning up	:	Wipe up with absorbent material (e.g. cloth, fleece). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
6.4 Reference t	to other sections		
see Section	n 8 + 13		
SECTION 7: H	landling and sto	rag	je
7.1 Precaution	s for safe handling	J	
Advice on s	safe handling	:	Prepare the working solution as given on the label(s) and/or the user instructions.
Advice on fire and exp	protection against	:	No special protective measures against fire required.
Hygiene m		:	Keep away from food and drink.
7.2 Conditions	for safe storage, i	ncl	uding any incompatibilities
areas and			Store at room temperature in the original container.
age conditi			Keep away from heat. Keep container tightly closed.
	common storage	:	Do not store together with alkalis.
7.3 Specific en			
Specific us	e(s)	:	none

SECTION 8: Exposure controls/personal protection

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8.1 Control parameters

none

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Citric acid monohydrate	Fresh water	0,44 mg/l
	Marine water	0,044 mg/l
	Fresh water sediment	7,52 mg/kg
	Marine sediment	0,752 mg/kg
	Soil	29,2 mg/kg

8.2 Exposure controls

Personal protective equipme Eye protection	Safety glasses with side-shields conforming to EN166	3
Hand protection Directive	The selected protective gloves have to satisfy the spe tions of EU Directive 89/686/EEC and the standard E derived from it.	
Remarks	Splash protection: disposable nitrile rubber gloves e.g Dermatril (layer thickness: 0.11 mm) made by KCL or from other manufacturers offering the same protection longed contact: Nitrile rubber gloves e.g. Camatril (>4 layer thickness: 0,40 mm) or butyl rubber gloves e.g. (>480 Min., layer thickness: 0,70 mm) made by KCL of from other manufacturers offering the same protection	gloves n. Pro- 80 Min., Butoject or gloves
Protective measures	Avoid contact with eyes.	

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

	• •
Appearance	: liquid
Colour	: yellow
Odour	: nearly odourless
Odour Threshold	: not determined
pН	: ca. 0,9, 20 °C, concentrate
Melting point/freezing point	: ca. 0 °C
Decomposition temperature	: No data available
Boiling point/boiling range	: ca. 100 °C
Flash point	: > 100 °C, ISO 2719
	Other information: Does not sustain combustion.
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: ca. 1,17 g/cm3, 20 °C
•	-

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Water solubility	: in all proportions , 20 °C
Partition coefficient: n-	: Not applicable
octanol/water	
Auto-ignition temperature	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

Corrosive in contact with : > 6,25 mm/a, Corrosive to metals, Aluminium, Mild steel

SECTION 10: Stability and reactivity

10.1 Reactivity

metals

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Reaction with alkalis(caustic liquors).

10.4 Conditions to avoid

Protect from frost, heat and sunlight.

10.5 Incompatible materials

None reasonably foreseeable.,

10.6 Hazardous decomposition products

None reasonably foreseeable.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity	: Acute toxicity estimate: > 10.000 mg/kg
Acute inhalation toxicity Acute dermal toxicity	 Acute toxicity estimate: > 50 mg/l Acute toxicity estimate: > 5.000 mg/kg

Skin corrosion/irritation

Components:

Citric acid monohydrate:

Rabbit, Mild skin irritation, Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Product:

Causes serious eye irritation., Expert judgement and weight of evidence determination.

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Germ cell mutagenicity

Citric acid monohydrate:

Components:

Components:

Citric acid monohydrate:		
Germ cell mutagenicity- As-	:	not mutagenic
sessment		

Revision Date:

10.01.2017

Respiratory or skin sensitisation

Carcinogenicity

Components:

ment

Citric acid monohydrate: Carcino

aela menenyaiatei		
ogenicity - Assess-	:	Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Components:

Citric acid monohydrate: Effects on fertility Reproductive toxicity - Assessment

: Rat, Oral, NOAEL: 2.500 mg/kg : No toxicity to reproduction

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Repeated dose toxicity

Components:

Citric acid monohydrate: Rat, NOAEL: 1.200 mg/kg, Oral

Aspiration toxicity

No data available

Further information

Product:

No data is available on the product itself.

SECTION 12: Ecological information

12.1 Toxicity

Components:	
Citric acid monohydrate:	
Toxicity to fish	: LC50 (Leuciscus idus (Golden orfe)): 440 - 760 mg/l, 96 h
Toxicity to daphnia and other	: EC50 (Daphnia magna): 85 - 120 mg/l, 72 h
aquatic invertebrates	
Toxicity to algae	: IC5 (Scenedesmus quadricauda (Green algae)): 640 mg/l

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12.2 Persist	ence and degradabil	ity
Product	<u>t:</u>	
	adability al Oxygen Demand	: Readily biodegradable., OECD 301D / EEC 84/449 C6 : ca. 3.090 mg/l ,1 % solution
	<u>nents:</u> cid monohydrate: adability	: Readily biodegradable., OECD Test Guideline 301B
12.3 Bioacc	umulative potential	
	nents: cid monohydrate: mulation	: No bioaccumulation is to be expected (log Pow <= 4).
12.4 Mobility	y in soil	
<u>Compo</u> Citric a Mobility	cid monohydrate:	: No data available
12.5 Results	s of PBT and vPvB as	ssessment
Produc	<u>t:</u>	
Assessment		: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
12.6 Other a	dverse effects	
Produc	<u>t:</u>	
Addition mation	al ecological infor-	: none
SECTION 1	3: Disposal consid	lerations
13.1 Waste t	treatment methods	
Product		: Dispose of the product according to the defined EWC (Euro-
	inated packaging tey for the unused	pean Waste Code) No.Take empty packaging to the recycling plant.European waste catalog (EWC) 070601
	ey for the unused	: Waste material of HZVA from fats, lubricants, soaps, deter- gents, disinfectants and personal protection products.
SECTION 1	4: Transport infor	nation
14.1 UN nun	-	

ADR	:	UN 3265
IMDG	:	UN 3265
ΙΑΤΑ	:	UN 3265

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14.2 UN proper ship	ping name	
ADR		: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Citric acid monohydrate)
IMDG		: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Citric acid monohydrate)
ΙΑΤΑ		: Corrosive liquid, acidic, organic, n.o.s. (Citric acid monohydrate)
14.3 Transport haza	rd class(es)	
ADR		: 8
IMDG		: 8
ΙΑΤΑ		: 8
14.4 Packing group		
ADR Packing group Classification Co Hazard Identifica Labels Tunnel restrictior	tion Number	: III : C3 : 80 : 8 : E
IMDG Packing group Labels EmS Code		: III : 8 : F-A, S-B
IATA Packing instructi aircraft) Packing group Labels	on (cargo	: 856 : III : Corrosive
14.5 Environmental	hazards	
ADR Environmentally	hazardous	: no
IMDG Marine pollutant		: no
14.6 Special precaut For personal pro		
	Ik according	to Annex II of MARPOL 73/78 and the IBC Code
SECTION 15: Regu	latory inform	mation
5	•	

Regulation (EC) No 850/2004 or	persistent organic pol-	:	Not applicable
Z11503 ZSDB_P_ALL EN	Page 8/10		

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lutants

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major- accident hazards involving dangerous substances.	: Not applicable
Volatile organic compounds	: none, Directive 2010/75/EC on the limitation of emissions of volatile organic compounds
Other regulations	: Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values.

15.2 Chemical safety assessment

Exempt

SECTION 16: Other information

Full text of H-Statements

H319

: Causes serious eye irritation.

Full text of other abbreviations

Eye Irrit. : Eye irritation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways: ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road: AICS - Australian Inventory of Chemical Substances: ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIOC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International according to Regulation (EC) No. 1907/2006



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Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification and procedure used to derive the classifikation for mixtures according to Regulation (EC) No. 1272/2008

Met. Corr. 1, H290	: Bridging principle "Substantially similar mixtures".
Eye Irrit. 2, H319	: Calculation method

Changes compared with the previous edition!!!

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.