

according to Regulation (EC) No. 1907/2006

Creation Date 06-Apr-2010 Revision Date 09-Feb-2024 Revision Number 10

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Description: <u>Sulfuric acid 0.05M solution (0.5M Concentrate)</u>

Cat No. : J/8460C/05, J/8460C/90

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

Recommended Use Laboratory chemicals. Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

Company

EU entity/business name Thermo Fisher Scientific Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

UK entity/business name

Fisher Scientific UK

Bishop Meadow Road, Loughborough, Leicestershire LE11 5RG, United Kingdom

Swiss distributor - Fisher Scientific AG Neuhofstrasse 11, CH 4153 Reinach

Tel: +41 (0) 56 618 41 11 e-mail - infoch@thermofisher.com

E-mail address begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

Tel: 01509 231166

Chemtrec US: (800) 424-9300 Chemtrec EU: 001-703-527-3887

For customers in Switzerland:

Tox Info Suisse Emergency Number: 145 (24hr)

Tox Info Suisse: +41-44 251 51 51 (Emergency number from abroad)

Chemtrec (24h) Toll-Free: 0800 564 402 Chemtrec Local: +41-43 508 20 11 (Zurich)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

FSUJ8460C

Sulfuric acid 0.05M solution (0.5M Concentrate)

Revision Date 09-Feb-2024

CLP Classification - Regulation (EC) No 1272/2008

Physical hazards

Substances/mixtures corrosive to metal

Category 1 (H290)

Health hazards

Based on available data, the classification criteria are not met

Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

2.2. Label elements



Signal Word

Warning

Hazard Statements

H290 - May be corrosive to metals

Precautionary Statements

P234 - Keep only in original packaging

P390 - Absorb spillage to prevent material damage

2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Component	CAS No	EC No	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Sulfuric acid	7664-93-9	231-639-5	1 - 5	Skin Corr. 1A (H314) Eye Dam. 1 (H318)
Water	7732-18-5	231-791-2	95 - 99	-

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Sulfuric acid	Skin Corr. 1A :: C>=15%	-	-
	Eye Irrit. 2 :: 5%<=C<15%		
	Skin Irrit. 2 :: 5%<=C<15%		

	Components	Reach Registration Number	
1	Sulfuric acid	01-2119458838-20	

Revision Date 09-Feb-2024

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek

immediate medical attention/advice.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if

symptoms occur.

Ingestion Do NOT induce vomiting. Rinse mouth. If symptoms persist, call a physician.

Inhalation Remove from exposure, lie down. If symptoms persist, call a physician.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Sulfur oxides.

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required.

6.2. Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

Sulfuric acid 0.05M solution (0.5M Concentrate)

Revision Date 09-Feb-2024

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep only in the original container.

Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK) (Germany)

Storage Class/LGK 12

Switzerland - Storage of hazardous substances

Storage class - SC 10/12

https://www.kvu.ch/de/themen/stoffe-und-produkte https://www.kvu.ch/fr/themes/substances-et-produits https://www.kvu.ch/it/temi/sostanze-e-prodotti

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

List source(s): EU - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC UK - EH40/2005 Work Exposure Limits, Forth edition. Published 2020. IRE - 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001. Published by the Health and Safety Authority. CH - The Government of Switzerland has set a directive on limit values for working materials (Grenzwerte am Arbeitsplatz) which is based on the Swiss Federal Regulation "Verordnung über die Verhütung von Unfällen und Berufskrankheiten". This directive is administered, periodically revised and enforced by SUVA (Swiss National Accident Insurance Fund).

L	Component	European Union	The United Kingdom	France	Belgium	Spain
ſ	Sulfuric acid	TWA: 0.05 mg/m ³ (8h)	STEL: 0.15 mg/m ³ 15	TWA / VME: 0.05 mg/m ³	TWA: 0.2 mg/m ³ 8 uren	TWA / VLA-ED: 0.05
1			min	(8 heures).	-	mg/m³ (8 horas)
L			TWA: 0.05 mg/m ³ 8 hr			

Component	Italy	Germany	Portugal	The Netherlands	Finland
Sulfuric acid	-	TWA: 0.1 mg/m ³ (8	TWA: 0.2 mg/m ³ 8 horas	TWA: 0.05 mg/m ³ 8	TWA: 0.05 mg/m ³ 8
		Stunden). AGW -		uren	tunteina
		exposure factor 1			STEL: 0.1 mg/m ³ 15
		TWA: 0.1 mg/m³ (8			minuutteina
		Stunden). MAK			
		Höhepunkt: 0.1 mg/m ³			

Sulfuric acid 0.05M solution (0.5M Concentrate)

Revision Date 09-Feb-2024

L	Component	Austria	Denmark	Switzerland	Poland	Norway
Γ	Sulfuric acid	MAK-KZGW: 0.2 mg/m ³	TWA: 0.05 mg/m ³ 8	STEL: 0.2 mg/m ³ 15	TWA: 0.05 mg/m ³ 8	TWA: 0.1 mg/m ³ 8 timer
		15 Minuten	timer	Minuten	godzinach	STEL: 0.3 mg/m ³ 15
		MAK-TMW: 0.1 mg/m ³ 8	STEL: 0.1 mg/m ³ 15	TWA: 0.1 mg/m ³ 8		minutter. value
		Stunden	minutter	Stunden		calculated thoracic
L						fraction, aerosol

Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Sulfuric acid	TWA: 0.05 mg/m ³	TWA-GVI: 0.05 mg/m ³ 8	TWA: 0.05 ppm 8 hr.	TWA: 0.05 mg/m ³	TWA: 1 mg/m ³ 8
	_	satima. when selecting	STEL: 0.15 ppm 15 min		hodinách. SO3
		the appropriate			TWA: 0.05 mg/m ³ 8
		exposure monitoring			hodinách. concentrated
		method the potential			H2SO4 mist
		limitations and			Ceiling: 2 mg/m ³ SO3
		disturbances that may			
		occur in the presence of			
		other sulfur compounds			
		should be taken into			
		account fog, thoracic			
		fraction			

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Sulfuric acid	TWA: 0.05 mg/m ³ 8 tundides. particles that	TWA: 0.05 mg/m ³ 8 hr when selecting an	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m³ 8 órában. AK	TWA: 0.05 mg/m ³ 8 klukkustundum.
	reach the upper	appropriate exposure			thoracic fraction
	respiratory tract	monitoring method,			Ceiling: 0.1 mg/m ³
		account should be taken			aerosol
		of potential limitations			
		and interferences that			
		may arise in the			
		presence of other			
		sulphur compounds			
		thoracic fraction			

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Sulfuric acid	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³ vapor	TWA: 0.05 mg/m ³ 8	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³ 8 ore
	_	IPRD	Stunden	_	
		STEL: 3 mg/m ³			

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Sulfuric acid	Skin notation	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³ 8	Indicative STEL: 0.2	TWA: 0.05 mg/m ³ 8 saat
	MAC: 1 mg/m ³		urah inhalable fraction,	mg/m ³ 15 minuter	
			fog	TLV: 0.1 mg/m ³ 8	
			STEL: 0.05 mg/m ³ 15	timmar. NGV	
			minutah inhalable		
			fraction, fog		

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

Component	Acute effects local	Acute effects	Chronic effects local	Chronic effects
	(Inhalation)	systemic (Inhalation)	(Inhalation)	systemic (Inhalation)
Sulfuric acid	$DNEL = 0.1 mg/m^3$		$DNEL = 0.05 mg/m^3$	

Sulfuric acid 0.05M solution (0.5M Concentrate)

Revision Date 09-Feb-2024

7664-93-9 (1 - 5)				
---------------------	--	--	--	--

Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water sediment	Water Intermittent Microorganisms in Soil (Agriculture sewage treatment
Sulfuric acid 7664-93-9 (1 - 5)	PNEC = 0.0025mg/L	PNEC = 0.002mg/kg sediment dw	PNEC = 8.8mg/L

Component	Marine water	Marine water sediment	Marine water Intermittent	Food chain	Air
Sulfuric acid 7664-93-9 (1 - 5)	PNEC = 0.00025mg/L	PNEC = 0.002mg/kg			
	-	sediment dw			

8.2. Exposure controls

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

Glove m Natural Nitrile r	rubber	Breakthrough time See manufacturers recommendations	Glove thickness	EU standard EN 374	Glove comments (minimum requirement)
Neop					
PV	C				

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Particulates filter conforming to EN 143

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted

Environmental exposure controls No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Sulfuric acid 0.05M solution (0.5M Concentrate)

Revision Date 09-Feb-2024

9.1. Information on basic physical and chemical properties

Physical State Liquid

Appearance Colorless

Odor
Odor No information available
No data available

Flammability (solid,gas) Not applicable Liquid

Explosion Limits No data available

Flash Point No information available Method - No information available

Autoignition Temperature No data available Decomposition Temperature No data available

pH < 1.5

Viscosity No data available

Water Solubility Miscible

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Vapor Pressure 1 mmHg @ 20 °C

Density / Specific Gravity 1.01-1.03

Bulk DensityNot applicableLiquidVapor DensityNo data available(Air = 1.0)

Particle characteristics Not applicable (liquid)

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions Corrosive to metals.

10.4. Conditions to avoid

Incompatible products. Excess heat.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Sulfur oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

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

Product Information

Sulfuric acid 0.05M solution (0.5M Concentrate)

Revision Date 09-Feb-2024

(a) acute toxicity;

Oral Based on available data, the classification criteria are not met **Dermal**

No data available

Inhalation Based on available data, the classification criteria are not met

Toxicology data for the components

	Component	LD50 Oral	LD50 Dermal	LC50 Inhalation		
	Sulfuric acid	2140 mg/kg (Rat)	-	LC50 = 0.375 mg/L (Rat) 4 h		
İ	Water	-	-	-		

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	EU	UK	Germany	IARC
Sulfuric acid				Group 1

No data available (g) reproductive toxicity;

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

No information available. **Target Organs**

(j) aspiration hazard; No data available

Symptoms / effects,both acute and No information available.

delayed

11.2. Information on other hazards

Endocrine Disrupting Properties Assess endocrine disrupting properties for human health. This product does not contain any

known or suspected endocrine disruptors.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effects Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

3	•

Component	Freshwater Fish	Water Flea	Freshwater Algae
Sulfuric acid	LC50: > 500 mg/L, 96h static	EC50: 29 mg/L/24h	-
	(Brachydanio rerio)		

Sulfuric acid 0.05M solution (0.5M Concentrate)

Revision Date 09-Feb-2024

Component	Microtox	M-Factor
Sulfuric acid	-	

12.2. Persistence and degradability

Persistence Miscible with water, Persistence is unlikely, based on information available.

12.3. Bioaccumulative potential Bioaccumulation is unlikely

The product is water soluble, and may spread in water systems Will likely be mobile in the 12.4. Mobility in soil

environment due to its water solubility. Highly mobile in soils

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Endocrine disrupting

properties

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

Persistent Organic Pollutant Ozone Depletion Potential

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused

Products

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of this container to hazardous or special waste collection point.

European Waste Catalogue (EWC) According to the European Waste Catalog, Waste Codes are not product specific, but

application specific.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used. Do not empty into drains. Solutions with low pH-value must be neutralized before

discharge.

Switzerland - Waste Ordinance Disposal should be in accordance with applicable regional, national and local laws and

regulations. Ordinance on the Avoidance and the Disposal of Waste (Waste Ordinance,

ADWO) SR 814.600

https://www.fedlex.admin.ch/eli/cc/2015/891/en

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

UN3264 14.1. UN number

14.2. UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

Technical Shipping Name Contains sulphuric acid

14.3. Transport hazard class(es) 8 14.4. Packing group

Ш

Sulfuric acid 0.05M solution (0.5M Concentrate)

Revision Date 09-Feb-2024

14.1. UN number UN3264

14.2. UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

Technical Shipping Name Contains sulphuric acid

14.3. Transport hazard class(es) 8 14.4. Packing group 8

IATA

14.1. UN number UN3264

14.2. UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

Technical Shipping Name Contains sulphuric acid

14.3. Transport hazard class(es) 8 14.4. Packing group III

14.5. Environmental hazards No hazards identified

14.6. Special precautions for user No special precautions required.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Sulfuric acid	7664-93-9	231-639-5	-	-	Х	Х	KE-32570	Х	Х
Water	7732-18-5	231-791-2	-	-	Х	Х	KE-35400	Х	-

	Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Γ	Sulfuric acid	7664-93-9	Х	ACTIVE	Х	-	X	Х	Х
Γ	Water	7732-18-5	Х	ACTIVE	Х	-	X	Х	Х

Legend: X - Listed '-' - Not Listed **KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Sulfuric acid	7664-93-9	-	Use restricted. See item 75. (see link for restriction details)	-
Water	7732-18-5	-	-	-

REACH links

https://echa.europa.eu/substances-restricted-under-reach

Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -
		Qualifying Quantities for Major Accident	Qualifying Quantities for Safety Report

Sulfuric acid 0.05M solution (0.5M Concentrate)

		Notification	Requirements	
Sulfuric acid	7664-93-9	Not applicable	Not applicable	
Water	Water 7732-18-5 Not applicable		Not applicable	

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

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

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification

Water endangering class = 1 (self classification)

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Sulfuric acid	WGK1	

Swiss Regulations

Article 4 para. 4 of the Ordinance on the protection of young people in the workplace (SR 822.115) and Article 1 lit. f of the EAER regulation on hazardous work and young people (SR 822.115.2).

Take note on Article 13 Maternity Ordinance (SR 822.111.52) with regards expectant and nursing mothers.

Component	Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81)	Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC)	Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure
Sulfuric acid 7664-93-9 (1 - 5)	Prohibited and Restricted Substances		

15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

Revision Date 09-Feb-2024

Substances/EU List of Notified Chemical Substances

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

TWA - Time Weighted Average IARC - International Agency for Research on Cancer

ACGIH - American Conference of Governmental Industrial Hygienists

Sulfuric acid 0.05M solution (0.5M Concentrate)

Revision Date 09-Feb-2024

Predicted No Effect Concentration (PNEC) **DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment LD50 - Lethal Dose 50% LC50 - Lethal Concentration 50% EC50 - Effective Concentration 50% **NOEC** - No Observed Effect Concentration POW - Partition coefficient Octanol:Water PBT - Persistent, Bioaccumulative, Toxic vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of ICAO/IATA - International Civil Aviation Organization/International Air

Dangerous Goods by Road **Transport Association** IMO/IMDG - International Maritime Organization/International Maritime MARPOL - International Convention for the Prevention of Pollution from

Ships

Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development ATE - Acute Toxicity Estimate **VOC** - (volatile organic compound)

BCF - Bioconcentration factor

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

On basis of test data Physical hazards **Health Hazards** Calculation method **Environmental hazards** Calculation method

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Creation Date 06-Apr-2010 **Revision Date** 09-Feb-2024 **Revision Summary** Not applicable.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 .

For Switzerland - Compiled in accordance with the technical provisions referred to in Annex 2, Number 3, ChemO (SR 813.11 - Ordinance on Protection against Dangerous Substances and Preparations).

Disclaimer

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

End of Safety Data Sheet