Free Sulfite Assay Kit (Liquid Ready™)

Kit Product

Kit identification

Trade name : Free Sulfite Assay Kit (Liquid Ready™)
Product code : K-FSULQR
Part Number(s) : K-FSULQR|700007892

Details of the supplier of the Kit safety information sheet

Manufacturer
Megazyme
Bray Business Park
Bray, County Wicklow, A98 YV29
Ireland
T +353 12861220 - F +353 12861264
cs@megazyme.com - www.megazyme.com

Importer
Neogen Corporation
620 Lesher Place
Lansing, Michigan 48912
United States of America
T 800.234.5333
sds@neogen.com - https://www.neogen.com/

General information

Restrictions on use : Do not use kit components from one kit with any other kit.
General description : This is a test kit that is comprised of several individual components, listed below, each of which may have its own Safety Data Sheet (SDS). Articles, and otherwise immobilized and inaccessible chemicals, do not have a Safety Data Sheet in this packet.

Kit contents

Name	GHS classification
Reagent 2	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Carc. 1A, H350
Reagent 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 1A, H350
Sulfite Calibrator (0.125 g/L)	Not classified

Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated

DOT	TDG	IMDG	IATA
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

Transport in bulk

Not applicable

Special precautions for user

DOT
Not regulated

TDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : Reagent 2
Product code : KC-FSULQR2

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Laboratory chemicals,Scientific research and development
Restrictions on use : Do not use kit components from one kit with any other kit.

1.4. Supplier's details

Manufacturer
Megazyme
Bray Business Park
Bray, County Wicklow, A98 YV29
Ireland
T +353 12861220 - F +353 12861264
cs@megazyme.com - www.megazyme.com

1.5. Emergency phone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

Country/Area	Organization	Emergency number
United States	Spill/CHEMTREC. Medical.	1-800-424-9300 1-800-498-5743

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Skin sensitization, Category 1	H317	May cause an allergic skin reaction.
Carcinogenicity, Category 1A	H350	May cause cancer.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
Hazard statements (GHS US) : H315 - Causes skin irritation
H317 - May cause an allergic skin reaction

Precautionary statements (GHS US)	:	H319 - Causes serious eye irritation H350 - May cause cancer. P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P261 - Avoid breathing dust, fume, gas, mist, vapors, spray. P264 - Wash hands, forearms and face thoroughly after handling. P272 - Contaminated work clothing must not be allowed out of the workplace. P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection. P302+P352 - If on skin: Wash with plenty of water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 - If exposed or concerned: Get medical advice/attention. P321 - Specific treatment (see supplemental first aid instruction on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice or attention. P337+P313 - If eye irritation persists: Get medical advice or attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P405 - Store locked up. P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

3% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Sulfuric acid	CAS-No.: 7664-93-9	1 – 5	Skin Corr. 1A, H314 Carc. 1A, H350
Ethanol	CAS-No.: 64-17-5	1 – 5	Flam. Liq. 1, H224 Carc. 1A, H350
formaldehyde (37%)	CAS-No.: 50-00-0	0.5 – 1	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation), H330 Acute Tox. 2 (Inhalation:gas), H330 Skin Corr. 1B, H314 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1A, H350

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.
Personal protection for first-aid responders. : First-aiders should consider self-protection and use the recommended personal protective equipment (see section 8).

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : None under normal conditions.
Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : None under normal conditions.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Avoid breathing dust/fume/gas/mist/vapors/spray.

For emergency responders

Protective equipment	:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	:	Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions	:	Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment	:	Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up	:	Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	:	Dispose of materials or solid residues at an authorized site.

For further information refer to section 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.
Hygiene measures	:	Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including incompatibilities

Technical measures	:	Keep in a cool, well-ventilated place away from heat.
Storage conditions	:	Store locked up.
Storage temperature	:	4 °C
Packaging materials	:	Always store product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Sulfuric acid (7664-93-9)	
USA - ACGIH® - Threshold Limit Values	
Local name	Sulfuric acid
ACGIH® TLV® TWA	0.2 mg/m³ (T - Thoracic particulate matter)
Remark (ACGIH®)	TLV® Basis: Mucostasis; Pulm func. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2026
USA - OSHA - Occupational Exposure Limits	
Local name	Sulfuric acid
OSHA PEL TWA	1 mg/m³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

Sulfuric acid (7664-93-9)	
USA - Cal/OSHA - Occupational Exposure Limits	
Local name	Sulfuric acid
Cal/OSHA PEL (OEL TWA)	0.1 mg/m³
Cal/OSHA STEL	3 mg/m³
Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)
USA - NIOSH - Occupational Exposure Limits	
Local name	Sulfuric acid
NIOSH REL 10h TWA	1 mg/m³
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

Ethanol (64-17-5)	
USA - ACGIH® - Threshold Limit Values	
Local name	Ethanol
ACGIH® TLV® STEL	1880 mg/m³
	1000 ppm
Remark (ACGIH®)	TLV® Basis: URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2026
USA - OSHA - Occupational Exposure Limits	
Local name	Ethyl alcohol (Ethanol)
OSHA PEL TWA	1900 mg/m³
	1000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - Cal/OSHA - Occupational Exposure Limits	
Local name	Ethyl alcohol; ethanol
Cal/OSHA PEL (OEL TWA)	1900 mg/m³
	1000 ppm
Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)
USA - NIOSH - Occupational Exposure Limits	
Local name	Ethyl alcohol (Ethanol)
NIOSH REL 10h TWA	1000 ppm
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

formaldehyde (37%) (50-00-0)	
USA - ACGIH® - Threshold Limit Values	
Local name	Formaldehyde
ACGIH® TLV® TWA	0.12 mg/m³
	0.1 ppm

formaldehyde (37%) (50-00-0)	
ACGIH® TLV® STEL	0.37 mg/m³
	0.3 ppm
Remark (ACGIH®)	TLV® Basis: URT & eye irr; URT cancer. Notations: DSEN; RSEN; A1 (Confirmed Human Carcinogen)
Regulatory reference	ACGIH 2025
USA - OSHA - Occupational Exposure Limits	
Local name	Formaldehyde
OSHA PEL TWA	0.75 ppm OSHA 1910.1048(c)(1)
OSHA PEL STEL	2 ppm OSHA 1910.1048(c)(2)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - Cal/OSHA - Occupational Exposure Limits	
Local name	Formaldehyde
Cal/OSHA PEL (OEL TWA)	0.75 ppm
Cal/OSHA STEL	2 ppm
Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)
USA - NIOSH - Occupational Exposure Limits	
Local name	Formaldehyde
NIOSH REL 10h TWA	0.016 ppm
NIOSH REL C	0.1 ppm [15-min]
Remark (NIOSH)	Ca = Potential occupational carcinogens
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:
Wear recommended personal protective equipment.

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Aqueous solution.
Color	:	Clear
Odor	:	Alcoholic
Odor threshold	:	No data available
pH	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Flammability (solid, gas)	:	Not applicable.
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	No data available
Solubility	:	Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Explosion limits	:	No data available
Particle characteristics	:	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Reagent 2	
Unknown acute toxicity (GHS US)	3% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

Sulfuric acid (7664-93-9)	
LD50 oral rat	2140 mg/kg body weight (Rat, Experimental value, Oral, 14 day(s))
LD50 oral	2140 mg/kg
LC50 Inhalation - Rat	0.375 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
LC50 Inhalation - Rat (Dust/Mist)	0.375 mg/l/4h
LC50 Inhalation - Rat (Vapors)	0.375 mg/l/4h
ATE US (oral)	2140 mg/kg body weight
ATE US (vapors)	0.375 mg/l/4h
ATE US (dust, mist)	0.375 mg/l/4h

Ethanol (64-17-5)	
LD50 oral rat	10470 mg/kg (Rat, male and female) (OECD Test Guideline 401)
LD50 dermal rabbit	> 2000 mg/kg rabbit, OECD Test Guideline 402
LC50 Inhalation - Rat	51 mg/l (Rat; 4 h; vapour) (OECD Test Guideline 403)
ATE US (oral)	10470 mg/kg body weight
ATE US (vapors)	51 mg/l/4h
ATE US (dust, mist)	51 mg/l/4h

formaldehyde (37%) (50-00-0)	
LD50 oral rat	800 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, 2 % aqueous solution, Oral, 14 day(s))
LD50 oral	600 mg/kg
LD50 dermal rabbit	270 mg/kg
LD50 dermal	270 mg/kg
LC50 Inhalation - Rat [ppm]	490 ppm (Equivalent or similar to OECD 403, 4 h, Rat, Male, Experimental value, Inhalation (gases))
ATE US (oral)	600 mg/kg body weight
ATE US (dermal)	270 mg/kg body weight
ATE US (gases)	490 ppmV/4h
ATE US (vapors)	0.5 mg/l/4h

formaldehyde (37%) (50-00-0)	
ATE US (dust, mist)	0.05 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.

Sulfuric acid (7664-93-9)	
pH	0.3 Source: HSDB

formaldehyde (37%) (50-00-0)	
pH	2.8 – 4 (37 %)

Serious eye damage/irritation : Causes serious eye irritation.

Sulfuric acid (7664-93-9)	
pH	0.3 Source: HSDB

formaldehyde (37%) (50-00-0)	
pH	2.8 – 4 (37 %)

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer.

Sulfuric acid (7664-93-9)	
IARC group	1 - Carcinogenic to humans
National Toxicity Program (NTP) Status	Known Human Carcinogens

Ethanol (64-17-5)	
NOAEL (chronic,oral,animal/male,2 years)	> 4250 mg/kg body weight (Mouse, male)(Target Organs: Liver)(Oral; 105 weeks; Frequency of treatment: 5 days/week)(OPPTS 870.4200)
NOAEL (chronic,oral,animal/female,2 years)	> 4000 mg/kg body weight (Mouse, female)(Target Organs: Liver)(Oral; 105 weeks; Frequency of treatment: 5 days/week)
IARC group	1 - Carcinogenic to humans

formaldehyde (37%) (50-00-0)	
IARC group	1 - Carcinogenic to humans
National Toxicity Program (NTP) Status	Known Human Carcinogens

Reproductive toxicity : Not classified

Ethanol (64-17-5)	
NOAEL (animal/male, F1)	13.8 (Mouse, male and female)(OECD Test Guideline 416)Reduction in sperm motility.
NOAEL (animal/female, F1)	13.8 (Mouse, male and female)(OECD Test Guideline 416)Reduction in sperm motility.

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Ethanol (64-17-5)	
LOAEL (oral,rat,90 days)	3160 mg/kg bodyweight/day
NOAEL (oral,rat,28 days)	1730 mg/kg bodyweight/day
NOAEL (oral,rat,90 days)	3160 mg/kg bodyweight/day

formaldehyde (37%) (50-00-0)	
NOAEL (oral,rat,28 days)	25 mg/kg bw/day

Aspiration hazard : Not classified

Sulfuric acid (7664-93-9)	
Viscosity, kinematic	12.228 mm²/s
formaldehyde (37%) (50-00-0)	
Viscosity, kinematic	No data available in the literature

Symptoms/effects after inhalation : None under normal conditions.
Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : None under normal conditions.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

Sulfuric acid (7664-93-9)	
LC50 - Fish [1]	16 – 28 mg/l (96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value, Lethal)
ErC50 algae	> 100 mg/l
NOEC (chronic)	0.15 mg/l Test organisms (species): other:
NOEC chronic fish	0.025 mg/l
NOEC chronic crustacea	0.15 mg/l

formaldehyde (37%) (50-00-0)	
LC50 - Fish [1]	6.7 mg/l (96 h, Morone saxatilis, Static system, Salt water, Experimental value, Lethal)
EC50 - Crustacea [1]	5.8 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia pulex, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	3.48 mg/l Source: ECHA
ErC50 algae	3.48 mg/l
NOEC (chronic)	≥ 6.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 48 mg/l Test organisms (species): Oryzias latipes Duration: '28 d'
NOEC chronic crustacea	1.04 mg/l

12.2. Persistence and degradability

Reagent 2	
Persistence and degradability	Not rapidly degradable

Sulfuric acid (7664-93-9)	
Persistence and degradability	Biodegradability: not applicable.
BOD (% of ThOD)	Not applicable

Ethanol (64-17-5)	
Persistence and degradability	Readily biodegradable.

formaldehyde (37%) (50-00-0)	
Persistence and degradability	Readily biodegradable in water.
Biodegradation	91 % OECD Test Guideline 301C, 14 d

12.3. Bioaccumulative potential

Sulfuric acid (7664-93-9)	
Partition coefficient n-octanol/water (Log Pow)	-2.2 (Estimated value)
Bioaccumulative potential	Not bioaccumulative.

formaldehyde (37%) (50-00-0)	
BCF - Fish [1]	< 1 (1 h, Flow-through system, Salt water, Weight of evidence)
Partition coefficient n-octanol/water (Log Pow)	0.35 (Calculated, KOWWIN, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

Sulfuric acid (7664-93-9)	
Ecology - soil	No (test)data on mobility of the substance available.

formaldehyde (37%) (50-00-0)	
Surface tension	73 mN/m (20 °C, Aqueous solution, 7.5 g/l)
Ecology - soil	Not applicable (gas). Toxic to flora.

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.
Ecological waste information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			

DOT	TDG	IMDG	IATA
14.2. Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
Not regulated

TDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are exempt or present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.		
Sulfuric acid	CAS-No. 7664-93-9	1 – 5%
formaldehyde (37%)	CAS-No. 50-00-0	0.5 – 1%

Sulfuric acid (7664-93-9)	
CERCLA RQ	1000 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb

formaldehyde (37%) (50-00-0)	
Listed on EPA Hazardous Air Pollutant (HAPS) Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits	
CERCLA RQ	100 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb

15.2. International regulations

No additional information available

15.3. State regulations

WARNING: This product can expose you to Formaldehyde (gas), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)
Revision date : 7/10/2026
Issue date : 9/11/2025

Full text of hazard classes and H-statements	
H224	Extremely flammable liquid and vapor
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H330	Fatal if inhaled
H341	Suspected of causing genetic defects.
H350	May cause cancer.

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : Sulfite Calibrator (0.125 g/L)
Product code : KC-FSULQR3

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Laboratory chemicals,Scientific research and development
Restrictions on use : Do not use kit components from one kit with any other kit.

1.4. Supplier's details

Manufacturer
Megazyme
Bray Business Park
Bray, County Wicklow, A98 YV29
Ireland
T +353 12861220 - F +353 12861264
cs@megazyme.com - www.megazyme.com

1.5. Emergency phone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

Country/Area	Organization	Emergency number
United States	Spill/CHEMTREC. Medical.	1-800-424-9300 1-800-498-5743

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. Label elements

GHS US labeling

No labeling applicable

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria for section 3.2 of HCS

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : If you feel unwell, seek medical advice.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

Personal protection for first-aid responders. : First-aiders should consider self-protection and use the recommended personal protective equipment (see section 8).

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : None under normal conditions.

Symptoms/effects after skin contact : None under normal conditions.

Symptoms/effects after eye contact : None under normal conditions.

Symptoms/effects after ingestion : None under normal conditions.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.
For further information refer to section 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.
Storage conditions : Keep cool. Protect from sunlight.
Packaging materials : Always store product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:
Wear recommended personal protective equipment.

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Aqueous solution.
Color	:	Clear
Odor	:	Odorless
Odor threshold	:	No data available
pH	:	10.2 – 10.6
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Flammability (solid, gas)	:	Not applicable.
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	No data available
Solubility	:	Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Explosion limits	:	No data available
Particle characteristics	:	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified
Skin corrosion/irritation	:	Not classified pH: 10.2 – 10.6
Serious eye damage/irritation	:	Not classified pH: 10.2 – 10.6
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified
Symptoms/effects after inhalation	:	None under normal conditions.
Symptoms/effects after skin contact	:	None under normal conditions.
Symptoms/effects after eye contact	:	None under normal conditions.
Symptoms/effects after ingestion	:	None under normal conditions.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general	:	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short–term (acute)	:	Not classified
Hazardous to the aquatic environment, long–term (chronic)	:	Not classified

12.2. Persistence and degradability

Sulfite Calibrator (0.125 g/L)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.
Ecological waste information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
Not regulated

TDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are exempt or present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

Revision date : 7/10/2026

Issue date : 9/11/2025

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : Reagent 1
Product code : KC-FSULQR1

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Laboratory chemicals,Scientific research and development
Restrictions on use : Do not use kit components from one kit with any other kit.

1.4. Supplier's details

Manufacturer
Megazyme
Bray Business Park
Bray, County Wicklow, A98 YV29
Ireland
T +353 12861220 - F +353 12861264
cs@megazyme.com - www.megazyme.com

1.5. Emergency phone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

Country/Area	Organization	Emergency number
United States	Spill/CHEMTREC. Medical.	1-800-424-9300 1-800-498-5743

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Carcinogenicity, Category 1A	H350	May cause cancer.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
Hazard statements (GHS US) : H315 - Causes skin irritation
H319 - Causes serious eye irritation
H350 - May cause cancer.

Precautionary statements (GHS US) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.
P302+P352 - If on skin: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P332+P313 - If skin irritation occurs: Get medical advice or attention.
P337+P313 - If eye irritation persists: Get medical advice or attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P405 - Store locked up.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

3.88% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Sulfuric acid	CAS-No.: 7664-93-9	1 – 5	Skin Corr. 1A, H314 Carc. 1A, H350
Ethanol	CAS-No.: 64-17-5	1 – 5	Flam. Liq. 1, H224 Carc. 1A, H350

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.
Personal protection for first-aid responders. : First-aiders should consider self-protection and use the recommended personal protective equipment (see section 8).

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : None under normal conditions.
Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : None under normal conditions.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions : Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.
For further information refer to section 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Store locked up.

Storage temperature : 4 °C

Packaging materials : Always store product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Sulfuric acid (7664-93-9)	
USA - ACGIH® - Threshold Limit Values	
Local name	Sulfuric acid
ACGIH® TLV® TWA	0.2 mg/m³ (T - Thoracic particulate matter)
Remark (ACGIH®)	TLV® Basis: Mucostasis; Pulm func. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2026
USA - OSHA - Occupational Exposure Limits	
Local name	Sulfuric acid
OSHA PEL TWA	1 mg/m³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - Cal/OSHA - Occupational Exposure Limits	
Local name	Sulfuric acid
Cal/OSHA PEL (OEL TWA)	0.1 mg/m³
Cal/OSHA STEL	3 mg/m³
Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)
USA - NIOSH - Occupational Exposure Limits	
Local name	Sulfuric acid
NIOSH REL 10h TWA	1 mg/m³
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

Ethanol (64-17-5)	
USA - ACGIH® - Threshold Limit Values	
Local name	Ethanol
ACGIH® TLV® STEL	1880 mg/m³
	1000 ppm
Remark (ACGIH®)	TLV® Basis: URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2026
USA - OSHA - Occupational Exposure Limits	
Local name	Ethyl alcohol (Ethanol)
OSHA PEL TWA	1900 mg/m³
	1000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - Cal/OSHA - Occupational Exposure Limits	
Local name	Ethyl alcohol; ethanol
Cal/OSHA PEL (OEL TWA)	1900 mg/m³
	1000 ppm
Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)
USA - NIOSH - Occupational Exposure Limits	
Local name	Ethyl alcohol (Ethanol)
NIOSH REL 10h TWA	1000 ppm
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:
Wear recommended personal protective equipment.

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Aqueous solution.
Color	:	Brown
Odor	:	Odorless
Odor threshold	:	No data available
pH	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Flammability (solid, gas)	:	Not applicable.
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	No data available
Solubility	:	Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Explosion limits	:	No data available
Particle characteristics	:	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Reagent 1	
Unknown acute toxicity (GHS US)	3.88% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

Sulfuric acid (7664-93-9)	
LD50 oral rat	2140 mg/kg body weight (Rat, Experimental value, Oral, 14 day(s))
LD50 oral	2140 mg/kg
LC50 Inhalation - Rat	0.375 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
LC50 Inhalation - Rat (Dust/Mist)	0.375 mg/l/4h
LC50 Inhalation - Rat (Vapors)	0.375 mg/l/4h
ATE US (oral)	2140 mg/kg body weight
ATE US (vapors)	0.375 mg/l/4h
ATE US (dust, mist)	0.375 mg/l/4h

Ethanol (64-17-5)	
LD50 oral rat	10470 mg/kg (Rat, male and female) (OECD Test Guideline 401)
LD50 dermal rabbit	> 2000 mg/kg rabbit, OECD Test Guideline 402
LC50 Inhalation - Rat	51 mg/l (Rat; 4 h; vapour) (OECD Test Guideline 403)
ATE US (oral)	10470 mg/kg body weight
ATE US (vapors)	51 mg/l/4h
ATE US (dust, mist)	51 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.

Sulfuric acid (7664-93-9)	
pH	0.3 Source: HSDB

Serious eye damage/irritation : Causes serious eye irritation.

Sulfuric acid (7664-93-9)	
pH	0.3 Source: HSDB

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : May cause cancer.

Sulfuric acid (7664-93-9)	
IARC group	1 - Carcinogenic to humans
National Toxicity Program (NTP) Status	Known Human Carcinogens

Ethanol (64-17-5)	
NOAEL (chronic,oral,animal/male,2 years)	> 4250 mg/kg body weight (Mouse, male)(Target Organs: Liver)(Oral; 105 weeks; Frequency of treatment: 5 days/week)(OPPTS 870.4200)
NOAEL (chronic,oral,animal/female,2 years)	> 4000 mg/kg body weight (Mouse, female)(Target Organs: Liver)(Oral; 105 weeks; Frequency of treatment: 5 days/week)
IARC group	1 - Carcinogenic to humans

Reproductive toxicity : Not classified

Ethanol (64-17-5)	
NOAEL (animal/male, F1)	13.8 (Mouse, male and female)(OECD Test Guideline 416)Reduction in sperm motility.
NOAEL (animal/female, F1)	13.8 (Mouse, male and female)(OECD Test Guideline 416)Reduction in sperm motility.

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Ethanol (64-17-5)	
LOAEL (oral,rat,90 days)	3160 mg/kg bodyweight/day
NOAEL (oral,rat,28 days)	1730 mg/kg bodyweight/day
NOAEL (oral,rat,90 days)	3160 mg/kg bodyweight/day

Aspiration hazard : Not classified

Sulfuric acid (7664-93-9)	
Viscosity, kinematic	12.228 mm²/s

Symptoms/effects after inhalation : None under normal conditions.

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Eye irritation.

Symptoms/effects after ingestion : None under normal conditions.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

Sulfuric acid (7664-93-9)	
LC50 - Fish [1]	16 – 28 mg/l (96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value, Lethal)
ErC50 algae	> 100 mg/l
NOEC (chronic)	0.15 mg/l Test organisms (species): other:
NOEC chronic fish	0.025 mg/l
NOEC chronic crustacea	0.15 mg/l

12.2. Persistence and degradability

Reagent 1	
Persistence and degradability	Not rapidly degradable

Sulfuric acid (7664-93-9)	
Persistence and degradability	Biodegradability: not applicable.
BOD (% of ThOD)	Not applicable

Ethanol (64-17-5)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

Sulfuric acid (7664-93-9)	
Partition coefficient n-octanol/water (Log Pow)	-2.2 (Estimated value)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

Sulfuric acid (7664-93-9)	
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.
Ecological waste information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated

DOT	TDG	IMDG	IATA
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
Not regulated

TDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are exempt or present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Sulfuric acid	CAS-No. 7664-93-9	1 – 5%

Sulfuric acid (7664-93-9)	
CERCLA RQ	1000 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

Revision date : 7/10/2026

Issue date : 4/2/2026

Full text of hazard classes and H-statements	
H224	Extremely flammable liquid and vapor
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation
H350	May cause cancer.

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.