

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 21-Feb-2012

Revision Date 21-Sep-2023

Revision Number 12

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

#### 1.1. Product identifier

Product Description:	Propionic acid
Cat No. :	149300000; 149300010; 149300025; 149300050
Synonyms	Carboxyethane; Ethanecarboxylic acid; Ethylformic acid
Index No	607-089-00-0
CAS No	79-09-4
EC No	201-176-3
Molecular Formula	C3 H6 O2
REACH registration number	01-2119486971-24

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

Recommended Use	Laboratory chemicals.
Sector of use	SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites
Product category	PC21 - Laboratory chemicals
Process categories	PROC15 - Use as a laboratory reagent
Environmental release category	ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)
Uses advised against	No Information available

#### 1.3. Details of the supplier of the safety data sheet

Com	pany

**UK entity/business name** Fisher Scientific UK Bishop Meadow Road, Loughborough, Leicestershire LE11 5RG, United Kingdom

#### EU entity/business name Thermo Fisher Scientific

Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium

E-mail address

begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

### **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1. Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

#### **Propionic acid**

#### Flammable liquids

Substances/mixtures corrosive to metal

#### Health hazards

Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity - (single exposure)

## Environmental hazards

Based on available data, the classification criteria are not met

Category 3 (H226)

Category 1 (H290)

Category 1 B (H314) Category 1 (H318) Category 3 (H335)

#### Full text of Hazard Statements: see section 16



Signal Word

Danger

#### **Hazard Statements**

- H226 Flammable liquid and vapor
- H290 May be corrosive to metals
- H314 Causes severe skin burns and eye damage
- H335 May cause respiratory irritation

#### **Precautionary Statements**

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

#### 2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.1. Substances

Component CAS No EC No Weight % CLP Classification - According to					
	Component	CAS No	EC No	Weight %	CLP Classification - According to

#### **Propionic acid**

#### Revision Date 21-Sep-2023

				GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Propionic acid	79-09-4	EEC No. 201-176-3	>95	Flam. Liq. 3 (H226) Met. Corr. 1 (H290) Skin Corr. 1B (H314) Eye Corr. 1 (H318) STOT SE 3 (H335)

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Propionic acid	Eye Irrit. 2 (H319) :: 10%<=C<25% Skin Corr. 1B (H314) :: C>=25% Skin Irrit. 2 (H315) :: 10%<=C<25% STOT SE 3 (H335) :: C>=10%	-	-

REACH registration number 01-2119486971-24
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Full text of Hazard Statements: see section 16

## **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of first aid measures

General Advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Call a physician immediately.
Ingestion	Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.
Inhalation	If not breathing, give artificial respiration. Remove from exposure, lie down. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately.
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
	Causes burns by all exposure routes. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

#### 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

CO<sub>2</sub>, dry chemical, dry sand, 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. The product causes burns of eyes, skin and mucous membranes.

#### Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

#### 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

Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### 6.2. Environmental precautions

Should not be released into the environment.

#### 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

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

#### 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Keep away from heat, sparks and flame. Do not store in metal containers.

## Technical Rules for Hazardous Substances (TRGS) 510Class 3Storage Class (LGK) (Germany)Class 3

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#### 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, Fourth edition. Published 2020. **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

Component	The United Kingdom	European Union	Ireland
Propionic acid	STEL: 15 ppm 15 min	TWA: 10 ppm (8h)	TWA: 10 ppm 8 hr.
	STEL: 46 mg/m <sup>3</sup> 15 min	TWA: 31 mg/m <sup>3</sup> (8h)	TWA: 31 mg/m <sup>3</sup> 8 hr.
	TWA: 10 ppm 8 hr	STEL: 20 ppm (15min)	STEL: 20 ppm 15 min
	TWA: 31 mg/m <sup>3</sup> 8 hr	STEL: 62 mg/m <sup>3</sup> (15min)	STEL: 62 mg/m <sup>3</sup> 15 min

#### Biological limit values

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

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

See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Propionic acid 79-09-4 ( >95 )				DNEL = 20.9mg/kg bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Propionic acid 79-09-4(>95)	DNEL = 62mg/m <sup>3</sup>		DNEL = 31mg/m <sup>3</sup>	DNEL = 73mg/m <sup>3</sup>

#### Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water sediment		Microorganisms in sewage treatment	Soil (Agriculture)
Propionic acid 79-09-4 ( >95 )	PNEC = 0.5mg/L	PNEC = 1.86mg/kg sediment dw	PNEC = 5mg/L	PNEC = 5mg/L	PNEC = 0.1258mg/kg soil
73-03-4 ( >33 )		Sediment dw			dw

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Propionic acid	PNEC = 0.05mg/L	PNEC =			
79-09-4 (>95)		0.186mg/kg			
		sediment dw			

#### 8.2. Exposure controls

#### **Engineering Measures**

Use only under a chemical fume hood. Use explosion-proof electrical/ventilating/lighting equipment. 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

	• • • • • • • • • • • • • • • • • • •	(Example and standard ENLACC	• •
Eye Protection	Goggies	(European standard - EN 166	))

Hand Protection	Protectiv	ve gloves		
Glove material Natural rubber Butyl rubber Nitrile rubber Neoprene PVC	Breakthrough time See manufacturers recommendations	Glove thickness -	EU standard EN 374	Glove comments (minimum requirement)

Long sleeved clothing.

Skin and body protection

C C

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure 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.

Remove 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 <b>Recommended Filter type:</b> Particulates filter conforming to EN 143 or Acid gases filter Type E Yellow conforming to EN14387
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. <b>Recommended half mask:-</b> Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141 When RPE is used a face piece Fit Test should be conducted
Environmental exposure controls	Prevent product from entering drains. Do not allow material to contaminate ground water system.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

@ 760 mmHg

#### 9.1. Information on basic physical and chemical properties

Physical State	Liquid
Appearance	No information available
Odor	pungent
Odor Threshold	No data available
Melting Point/Range	-22 °C / -7.6 °F
Softening Point	No data available
Boiling Point/Range	141 °C / 285.8 °F

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**Propionic acid** 

Flammability (solid,gas)Not applicableLiquidExplosion LimitsLower 2.1 Vol%Upper 12.1 Vol%Flash Point51 °C / 123.8 °FMethod - No information availableAutoignition Temperature485 °C / 905 °FMethod - No information availablepH2.5100 g/l aq. solViscosity1.02 mPa.s at 25 °CWater Solubility in other solventsNo information availablePartition Coefficient (n-octanol/water)Iog PowComponentIog PowPropionic acid0.33Vapor Pressure5 mbar @ 20 °CDensity / Specific Gravity0.990Bulk DensityNot applicableVapor Density2.56Auto phicable (liquid)	Flammability (liquid)	Flammable	On basis of test data
Upper 12.1 Vol%Flash Point51 °C / 123.8 °FMethod - No information availableAutoignition Temperature485 °C / 905 °FMethod - No information availablepH2.5100 g/l aq. solViscosity1.02 mPa.s at 25 °CWater SolubilityMiscibleSolubility in other solventsNo information availablePartition Coefficient (n-octanol/water)Iog PowPropionic acid0.33Vapor Pressure5 mbar @ 20 °CDensity / Specific Gravity0.990Bulk DensityNot applicableLiquidVapor Density2.56(Air = 1.0)	Flammability (solid,gas)	Not applicable	Liquid
Flash Point51 °C / 123.8 °FMethod - No information availableAutoignition Temperature485 °C / 905 °FInformation availablepH2.5100 g/l aq. solViscosity1.02 mPa.s at 25 °CWater SolubilityMiscibleSolubility in other solventsNo information availablePartition Coefficient (n-octanol/water)Information availableComponentIog PowPropionic acid0.33Vapor Pressure5 mbar @ 20 °CDensity / Specific Gravity0.990Bulk DensityNot applicableLiquidLiquidVapor Density2.56	Explosion Limits	Lower 2.1 Vol%	
Autoignition Temperature485 °C / 905 °FDecomposition TemperatureNo data availablepH2.5100 g/l aq. solViscosity1.02 mPa.s at 25 °CWater SolubilityMiscibleSolubility in other solventsNo information availablePartition Coefficient (n-octanol/water)Componentlog PowPropionic acid0.33Vapor Pressure5 mbar @ 20 °CDensity / Specific Gravity0.990Bulk DensityNot applicableLiquidLiquidVapor Density2.56		Upper 12.1 Vol%	
Decomposition Temperature pHNo data available 2.5100 g/l aq. solPH2.5100 g/l aq. solViscosity1.02 mPa.s at 25 °CWater SolubilityMiscibleSolubility in other solventsNo information availablePartition Coefficient (n-octanol/water)Iog PowComponentIog PowPropionic acid0.33Vapor Pressure5 mbar @ 20 °CDensity / Specific Gravity0.990Bulk DensityNot applicableLiquid2.56Vapor Density2.56	Flash Point	51 °C / 123.8 °F	Method - No information available
pH2.5100 g/l aq. solViscosity1.02 mPa.s at 25 °CWater SolubilityMiscibleSolubility in other solventsNo information availablePartition Coefficient (n-octanol/water)Iog PowComponentlog PowPropionic acid0.33Vapor Pressure5 mbar @ 20 °CDensity / Specific Gravity0.990Bulk DensityNot applicableLiquidVapor Density2.56	Autoignition Temperature	485 °C / 905 °F	
Viscosity1.02mPa.s at 25 °CWater SolubilityMiscibleSolubility in other solventsNo information availablePartition Coefficient (n-octanol/water)Componentlog PowPropionic acid0.33Vapor Pressure5 mbar @ 20 °CDensity / Specific Gravity0.990Bulk DensityNot applicableLiquidVapor Density2.56	Decomposition Temperature	No data available	
Water Solubility       Miscible         Solubility in other solvents       No information available         Partition Coefficient (n-octanol/water)       Iog Pow         Component       log Pow         Propionic acid       0.33         Vapor Pressure       5 mbar @ 20 °C         Density / Specific Gravity       0.990         Bulk Density       Not applicable       Liquid         Vapor Density       2.56       (Air = 1.0)		2.5	100 g/l aq. sol
Solubility in other solventsNo information availablePartition Coefficient (n-octanol/water)Componentlog PowPropionic acid0.33Vapor Pressure5 mbar @ 20 °CDensity / Specific Gravity0.990Bulk DensityNot applicableLiquidVapor Density2.56	Viscosity	1.02 mPa.s at 25 °C	
Partition Coefficient (n-octanol/water)         Component       log Pow         Propionic acid       0.33         Vapor Pressure       5 mbar @ 20 °C         Density / Specific Gravity       0.990         Bulk Density       Not applicable       Liquid         Vapor Density       2.56       (Air = 1.0)	Water Solubility	Miscible	
Componentlog PowPropionic acid0.33Vapor Pressure5 mbar @ 20 °CDensity / Specific Gravity0.990Bulk DensityNot applicableLiquidVapor Density2.56	Solubility in other solvents	No information available	
Propionic acid0.33Vapor Pressure5 mbar @ 20 °CDensity / Specific Gravity0.990Bulk DensityNot applicableLiquidVapor Density2.56	Partition Coefficient (n-octanol/w	vater)	
Vapor Pressure5 mbar @ 20 °CDensity / Specific Gravity0.990Bulk DensityNot applicableVapor Density2.56	Component	log Pow	
Density / Specific Gravity0.990Bulk DensityNot applicableLiquidVapor Density2.56(Air = 1.0)	Propionic acid	0.33	
Bulk DensityNot applicableLiquidVapor Density2.56(Air = 1.0)	Vapor Pressure	5 mbar @ 20 °C	
Vapor Density         2.56         (Air = 1.0)	Density / Specific Gravity	0.990	
	Bulk Density	Not applicable	Liquid
Particle characteristics Not applicable (liquid)	Vapor Density	2.56	(Air = 1.0)
	Particle characteristics	Not applicable (liquid)	

C3 H6 O2

74.08

9.2. Other information

Molecular Formula Molecular Weight Explosive Properties

## **SECTION 10: STABILITY AND REACTIVITY**

explosive air/vapour mixtures possible

10.1. Reactivity	None known, based on information available
10.2. Chemical stability	Stable under normal conditions.
10.3. Possibility of hazardous react	ions
Hazardous Polymerization Hazardous Reactions	Hazardous polymerization does not occur. None under normal processing.
10.4. Conditions to avoid	Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition.
10.5. Incompatible materials	Bases. Strong oxidizing agents. Amines. Halogens. Metals. Reducing Agent.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### **SECTION 11: TOXICOLOGICAL INFORMATION**

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

**Product Information** 

(a) acute toxicity;

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**Propionic acid** 

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

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Propionic acid	LD50 = 3455 mg/kg (Rat)	LD50 = 3235 mg/kg (Rabbit)	LC50 = > 19.7 mg/l (Rat) 1 h

(b) skin corrosion/irritation;	Category 1
(c) serious eye damage/irritation;	Category 1
(d) respiratory or skin sensitization; Respiratory Skin	Based on available data, the classification criteria are not met Based on available data, the classification criteria are not met
(e) germ cell mutagenicity;	Based on available data, the classification criteria are not met
	Not mutagenic in AMES Test
(f) carcinogenicity;	Based on available data, the classification criteria are not met
	There are no known carcinogenic chemicals in this product
(g) reproductive toxicity;	Based on available data, the classification criteria are not met
(h) STOT-single exposure;	Category 3
Results / Target organs	Respiratory system.
(i) STOT-repeated exposure;	Based on available data, the classification criteria are not met
Target Organs	None known.
(j) aspiration hazard;	Based on available data, the classification criteria are not met
Symptoms / effects,both acute and delayed	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

### 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**

Do not empty into drains.

Component	Freshwater Fish	Water Flea	Freshwater Algae
Propionic acid	LC50: = 51 mg/L, 96h static		EC50: = 45.8 mg/L, 72h
	(Oncorhynchus mykiss)		(Desmodesmus subspicatus)

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#### Propionic acid

LC50: 73 - 99.7 mg/L, 96h static (Lepomis macrochirus) LC50: > 1 mg/L, 96h static (Pimephales promelas)	EC50: = 43 mg/L, 96h (Desmodesmus subspicatus)
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Component	Microtox	M-Factor
Propionic acid	EC50 = 59.6 mg/L 17 h	

<u>12.2. Persistence and degradability</u> Persistence	Expected to be biodegradable Miscible with water, Persistence is unlikely, based on information available.				
12.3. Bioaccumulative potential	Bioaccumulation is unlikely				
Component	log Pow	Bioconcentration factor (BCF)			
Propionic acid	0.33	No data available			
<u>12.4. Mobility in soil</u>	The product is water soluble, and may spread i environment due to its water solubility. Highly r	, ,			
<u>12.5. Results of PBT and vPvB</u> assessment	Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB).				
<u>12.6. Endocrine disrupting</u> properties Endocrine Disruptor Information	This product does not contain any known or su	spected endocrine disruptors			
<u>12.7. Other adverse effects</u> Persistent Organic Pollutant Ozone Depletion Potential	This product does not contain any known or sur This product does not contain any known or sur	•			

## **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. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.
European Waste Catalogue (EWC)	According to the European Waste Catalog, Waste Codes are not product specific, but application specific.
Other Information	Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Can be landfilled or incinerated, when in compliance with local regulations. Do not empty into drains. Large amounts will affect pH and harm aquatic organisms.

## SECTION 14: TRANSPORT INFORMATION

**Propionic acid** 

IMDG/IMO

<u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> Subsidiary Hazard Class <u>14.4. Packing group</u>	UN3463 PROPIONIC ACID 8 3 II
ADR	
<u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> Subsidiary Hazard Class <u>14.4. Packing group</u>	UN3463 PROPIONIC ACID 8 3 II
IATA	
<u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> Subsidiary Hazard Class <u>14.4. Packing group</u>	UN3463 PROPIONIC ACID 8 3 II
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
Propionic acid	79-09-4	201-176-3	-	-	Х	Х	KE-29352	Х	Х
Component	CAS No	TSCA	notific	iventory ation - Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Propionic acid	79-09-4	Х	ACT	IVE	Х	-	Х	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)
Propionic acid	79-09-4	-	Use restricted. See item 75.	-

#### **Propionic acid**

	(see link for restriction	
	details)	

#### **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) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Propionic acid	79-09-4	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 work .

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

See table for values

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

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
Propionic acid 79-09-4 ( >95 )	Prohibited and Restricted Substances		

#### 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

### **SECTION 16: OTHER INFORMATION**

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

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

#### Legend

CAS - Chemical Abstracts Service EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances	TSCA - United States Toxic Substances Control Act Section 8(b) Inventory al DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIOC - New Zealand Inventory of Chemicals
WEL - Workplace Exposure Limit ACGIH - American Conference of Governmental Industrial Hygienists DNEL - Derived No Effect Level RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic	<ul> <li>TWA - Time Weighted Average</li> <li>IARC - International Agency for Research on Cancer</li> <li>Predicted No Effect Concentration (PNEC)</li> <li>LD50 - Lethal Dose 50%</li> <li>EC50 - Effective Concentration 50%</li> <li>POW - Partition coefficient Octanol:Water</li> <li>vPvB - very Persistent, very Bioaccumulative</li> </ul>
ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code OECD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor Key literature references and sources for data https://echa.europa.eu/information-on-chemicals	ICAO/IATA - International Civil Aviation Organization/International Air Transport Association MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

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

#### 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.

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# This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

Disclaimer

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## End of Safety Data Sheet