

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

Creation Date 10-Nov-2010

Revision Date 22-Sep-2023

Revision Number 10

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

1.1. Product identifier

Product Description:	
Cat No. :	
CAS No	
EC No	
Molecular Formula	
REACH registration number	

3-Chloropropionyl chloride 109990000; 109991000; 109995000 625-36-5 210-890-4 C3 H4 Cl2 O 01-2120097787-33

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

Recommended Use Sector of use	Laboratory chemicals. 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

Company

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

EU entity/business name

begel.sdsdesk@thermofisher.com

Thermo Fisher Scientific Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium

E-mail address

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

3-Chloropropionyl chloride

Substances/mixtures corrosive to metal

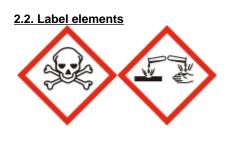
Health hazards

Acute oral toxicity Acute Inhalation Toxicity - Vapors Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation

Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16



Signal Word

Danger

Hazard Statements

H290 - May be corrosive to metals
H302 - Harmful if swallowed
H330 - Fatal if inhaled
H314 - Causes severe skin burns and eye damage
EUH071 - Corrosive to the respiratory tract
Combustible liquid

Precautionary Statements

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P310 - Immediately call a POISON CENTER or doctor/physician
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB) Lachrymator (substance which increases the flow of tears) Stench

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

ACR10999

Category 1 (H290)

Category 4 (H302) Category 1 (H330) Category 1 (H314) A Category 1 (H318)

3-Chloropropionyl chloride

Component	CAS No	EC No	Weight %	CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Propanoyl chloride, 3-chloro-	625-36-5	EEC No. 210-890-4	<= 100	Skin Corr. 1A (H314) Eye Dam. 1 (H318) Acute Tox. 4 (H302) Acute Tox. 1 (H330) Met. Corr. 1 (H290) (EUH071)

REACH registration number	01-2120097787-33

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. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Ingestion	Do NOT induce vomiting. Call a physician or poison control center immediately.
Inhalation	If not breathing, give artificial respiration. 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. Remove to fresh air. Immediate medical attention is required.
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 me	edical attention and special treatment needed
Notes to Physician	Treat symptomatically.
	SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

3-Chloropropionyl chloride

CO₂, dry chemical, dry sand, alcohol-resistant foam. Water mist may be used to cool closed containers.

Extinguishing media which must not be used for safety reasons DO NOT USE WATER.

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. Combustible material. Containers may explode when heated.

Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrogen chloride gas.

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. Remove all sources of ignition. Take precautionary measures against static discharges.

6.2. Environmental precautions

Should not be released into the environment.

6.3. Methods and material for containment and cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Remove all sources of ignition.

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. Keep away from open flames, hot surfaces and sources of ignition.

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 away from heat, sparks and flame. Protect from moisture. Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

Technical Rules for Hazardous Substances (TRGS) 510 Class 6.1A Storage Class (LGK) (Germany)

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits List source(s):

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) No information available

Predicted No Effect Concentration (PNEC)

See values below.

Γ	Component	Fresh water	Fresh water	Water Intermittent	Microorganisms in	Soil (Agriculture)
			sediment		sewage treatment	
Γ	Propanoyl chloride,	PNEC =	PNEC =	PNEC = 0.453mg/L	PNEC = 482mg/L	PNEC =
	3-chloro-	0.0453mg/L	0.335mg/kg	-		0.0403mg/kg soil
L	625-36-5 (<= 100)	-	sediment dw			dw

Со	mponent	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Propar	noyl chloride,	PNEC =	PNEC =			
3-	-chloro-	0.00453mg/L	0.0335mg/kg			
625-36	6-5(<= 100)		sediment dw			

8.2. Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting equipment.

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
 Goggles (European standard - EN 166)

 Hand Protection
 Protective gloves

 Glove material
 Breakthrough time
 Glove thickness
 EU standard
 Glove comments

 Natural rubber
 See manufacturers
 EN 374
 (minimum requirement)

3-Chloro	oropionyl	chloride

Nitrile rubber	-	
Neoprene		
PVC		
Skin and body protection	Long sleeved clothing.	

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 Recommended Filter type: Particulates filter conforming to EN 143 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. Recommended half mask:- 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 No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	Liquid	
Appearance Odor Odor Threshold Melting Point/Range Softening Point Boiling Point/Range Flammability (liquid) Flammability (solid,gas) Explosion Limits	Colorless to brown Acrid No data available -32 °C / -25.6 °F No data available 143 - 145 °C / 289.4 - 293 °F Flammable Combustible liquid Not applicable Lower 8.8 Vol%	@ 760 mmHg On basis of test data Liquid
Flash Point Autoignition Temperature Decomposition Temperature pH Viscosity Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wate Vapor Pressure Density / Specific Gravity Bulk Density Vapor Density Particle characteristics	Upper 20.2 Vol% 70.5 °C / 158.9 °F 490 °C / 914 °F 30 °C < 7 1.4 mPa s at 20 °C reacts No information available er) 10 mbar @ 20 °C 1.330 Not applicable 4.4 Not applicable (liquid)	Method - No information available Liquid (Air = 1.0)

9.2. Other information

Molecular Formula Molecular Weight Explosive Properties C3 H4 Cl2 O 126.97 explosive air/vapour mixtures possible

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

10.2. Chemical stabilityReacts violently with water. Moisture sensitive.10.3. Possibility of hazardous reactionsNo information available.
None under normal processing.Hazardous ReactionsNo information available.
None under normal processing.10.4. Conditions to avoidIncompatible products. Exposure to moist air or water. Keep away from open flames, hot
surfaces and sources of ignition. Excess heat.10.5. Incompatible materialsAlcohols. Metals. Strong oxidizing agents. Strong Alkalis. . Metals.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen chloride gas.

SECTION 11: TOXICOLOGICAL INFORMATION

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

Product Information

 (a) acute toxicity;
 Oral
 Category 4

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

 Inhalation
 Category 1

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Propanoyl chloride, 3-chloro-	ca 1130 mg/kg (Rat)	-	<0.95 mg/L/1h (Rat)

(b) skin corrosion/irritation;	Category 1 A
(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

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(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;	Based on available data, the classification criteria are not met		
(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		
Other Adverse Effects			
Symptoms / effects,both acute and delayed	Symptoms of overexposure may be headache, dizziness, tired Product is a corrosive material. Use of gastric lavage or emes Possible perforation of stomach or esophagus should be inves severe swelling, severe damage to the delicate tissue and dar	sis is contraindic stigated. Ingestic	ated. on causes
11.2 Information on other bazards			

<u>11.2. Information on other hazards</u>

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
Propanoyl chloride, 3-chloro-	LC50 (96 h) > 100 - < 215 mg/l (Prochydania raria)		
	(Brachydanio rerio)		

12.2. Persistence and degradability Persistence	Readily biodegradable Soluble in water, Persistence is unlikely, based on information available, Reacts with water.
12.3. Bioaccumulative potential	Bioaccumulation is unlikely
<u>12.4. Mobility in soil</u>	The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility. Highly mobile in soils
<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 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. 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	Waste codes should be assigned by the user based on the application for which the product was used. Do not flush to sewer. 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

IMDG/IMO

14.1. UN number 14.2. UN proper shipping name Technical Shipping Name 14.3. Transport hazard class(es) Subsidiary Hazard Class 14.4. Packing group	UN3390 TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S. 3-Chloropropionyl chloride 6.1 8 I
ADR	
<u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> Technical Shipping Name <u>14.3. Transport hazard class(es)</u> Subsidiary Hazard Class <u>14.4. Packing group</u>	UN3390 TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S. 3-Chloropropionyl chloride 6.1 8 I
IATA	FORBIDDEN FOR IATA TRANSPORT
<u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> Technical Shipping Name <u>14.3. Transport hazard class(es)</u> Subsidiary Hazard Class <u>14.4. Packing group</u>	UN3390 TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S.* FORBIDDEN FOR IATA TRANSPORT 3-Chloropropionyl chloride 6.1 8 I

3-Chloropropionyl chloride

14.5. Environmental hazards No hazards identified

14.6. Special precautions for user No special precautions required.

14.7. Maritime transport in bulk Not applicable, packaged goods

according to IMO instruments

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
Propanoyl chloride, 3-chloro-	625-36-5	210-890-4	-	-	Х	Х	KE-05881	Х	Х
Component	CAS No	TSCA	TSCA In notific		DSL	NDSL	AICS	NZIoC	PICCS
			Active-	nactive					
Propanoyl chloride, 3-chloro-	625-36-5	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

Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	5	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Propanoyl chloride, 3-chloro-	625-36-5	-	-	-

Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) - Seveso III Directive (2012/1	
		Qualifying Quantities for Major Accident	Qualifying Quantities for Safety Report
		Notification	Requirements
Propanoyl chloride, 3-chloro-	625-36-5	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 work .

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
Propanoyl chloride, 3-chloro-	WGK1	

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 H302 - Harmful if swallowed H330 - Fatal if inhaled

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

EUH071 - Corrosive to the respiratory tract

Legend

Inventory

Substances List

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

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

NZIOC - New Zealand Inventory of Chemicals

Predicted No Effect Concentration (PNEC)

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

EC50 - Effective Concentration 50%

IARC - International Agency for Research on Cancer

TWA - Time Weighted Average

LD50 - Lethal Dose 50%

CAS - Chemical Abstracts Service

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

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

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 **Dangerous Goods Code** Ships OECD - Organisation for Economic Co-operation and Development ATE - Acute Toxicity Estimate BCF - Bioconcentration factor VOC - (Volatile Organic Compound)

Key literature references and sources for data

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

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 10-Nov-2010

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3-Chloropropionyl chloride

Revision Date Revision Summary 22-Sep-2023 SDS sections updated.

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

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