

SAFETY DATA SHEET

Creation Date 22-Sep-2009

Revision Date 05-Jun-2026

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication (29 CFR 1910.1200)

1. Identification

Product Name	Allyl chloride, stabilized
Cat No. :	AC102910000; AC102910010; AC102910025; AC102910030; AC102910040; AC102910050; AC102910060; AC102910070; AC102910080; AC102910090; AC102910100; AC102910110; AC102910120; AC102910130; AC102910140; AC102910150; AC102910160; AC102910170; AC102910180; AC102910190; AC102910200; AC102910210; AC102910220; AC102910230; AC102910240; AC102910250; AC102910260; AC102910270; AC102910280; AC102910290; AC102910300; AC102910310; AC102910320; AC102910330; AC102910340; AC102910350; AC102910360; AC102910370; AC102910380; AC102910390; AC102910400; AC102910410; AC102910420; AC102910430; AC102910440; AC102910450; AC102910460; AC102910470; AC102910480; AC102910490; AC102910500; AC102910510; AC102910520; AC102910530; AC102910540; AC102910550; AC102910560; AC102910570; AC102910580; AC102910590; AC102910600; AC102910610; AC102910620; AC102910630; AC102910640; AC102910650; AC102910660; AC102910670; AC102910680; AC102910690; AC102910700; AC102910710; AC102910720; AC102910730; AC102910740; AC102910750; AC102910760; AC102910770; AC102910780; AC102910790; AC102910800; AC102910810; AC102910820; AC102910830; AC102910840; AC102910850; AC102910860; AC102910870; AC102910880; AC102910890; AC102910900; AC102910910; AC102910920; AC102910930; AC102910940; AC102910950; AC102910960; AC102910970; AC102910980; AC102910990; AC102911000
CAS No	107-05-1
Synonyms	3-Chloropropene
Recommended Use	Laboratory chemicals.
Uses advised against	Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

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

2. Hazard(s) identification

Classification

This chemical is considered hazardous according to [US] OSHA (29 CFR 1910.1200, 2024)

Flammable liquids	Category 2
Acute oral toxicity	Category 3
Acute dermal toxicity	Category 3
Acute Inhalation Toxicity - Vapors	Category 3
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Germ Cell Mutagenicity	Category 2
Carcinogenicity	Category 2

Label Elements

Signal Word

Danger

Hazard Statements

- Highly flammable liquid and vapor
- Causes skin irritation
- Causes serious eye irritation
- May cause respiratory irritation
- Suspected of causing genetic defects
- Suspected of causing cancer
- Causes damage to organs through prolonged or repeated exposure
- Toxic if swallowed, in contact with skin or if inhaled



Precautionary Statements

Prevention

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Wear protective gloves/protective clothing/eye protection/face protection
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Use only outdoors or in a well-ventilated area
- Do not breathe dust/fume/gas/mist/vapors/spray
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- Keep container tightly closed
- Ground and bond container and receiving equipment
- Use explosion-proof electrical/ventilating/lighting equipment
- Use non-sparking tools
- Take action to prevent static discharges
- Keep cool

Response

IF exposed or concerned: Get medical attention/advice

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a POISON CENTER or doctor

Skin

Call a POISON CENTER or doctor if you feel unwell
Take off contaminated clothing and wash before reuse
If skin irritation occurs: Get medical advice/attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do
If eye irritation persists: Get medical advice/attention

Ingestion

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Very toxic to aquatic life

Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available

WARNING. Cancer - <https://www.p65warnings.ca.gov/>.

3. Composition/information on Ingredients

Component	CAS No	Weight %
Allyl chloride	107-05-1	
Propylene oxide	75-56-9	0.0

4. 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.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with a pocket mask equipped with a one-way valve or other proper respiratory protection. Immediate medical attention is required.
Ingestion	Do NOT induce vomiting. Call a physician or poison control center immediately for further instructions.
Most important symptoms and effects	None reasonably foreseeable. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Notes to Physician	Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media	Carbon dioxide (CO ₂). Dry chemical. Water mist may be used to cool closed containers. Chemical foam. Water mist may be used to cool closed containers.
Unsuitable Extinguishing Media	No information available
Flash Point	-29 °C / -20.2 °F
Method -	No information available
Autoignition Temperature	390 °C / 734 °F

Specific Hazards Arising from the Chemical

Flammable. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. May explode when heated. Vapors may form explosive mixtures with air. Do not allow run-off from fire-fighting to enter water courses.

Hazardous Combustion Products

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

Protective Equipment and Precautions 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.

NFPA

Health
3

Flammability
3

Instability
2

Phy

6. Accidental release measures

Personal Precautions

Ensure adequate ventilation. Use personal protective equipment as recommended. Move away from and upwind of spill/leak. Evacuate personnel to safe areas. Eliminate all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions

Do not flush into surface water or sanitary sewer system. Do not allow product to enter drain or sewer system. Prevent product from entering drainage system. If spillage cannot be contained, should be advised if significant spillages cannot be contained.

Methods for Containment and Clean Up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

7. Handling and Storage

Handling

Wear personal protective equipment/face protection. Do not get in eyes, on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.

Storage.

Flammables area. Keep away from heat, sparks and flame. Keep container in a dry and well-ventilated place. Incompatible Materials. Acids. Bases. Oxidizers. Finely powdered metals.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Allyl chloride	TWA: 1 ppm STEL: 2 ppm Skin	(Vacated) TWA: 1 ppm (Vacated) TWA: 3 mg/m ³ (Vacated) STEL: 2 ppm (Vacated) STEL: 6 mg/m ³ TWA: 1 ppm TWA: 3 mg/m ³	IDLH: 250 ppm REL = 1 ppm (TWA) REL = 3 mg/m ³ (TWA) STEL: 2 ppm STEL: 6 mg/m ³
Propylene oxide	TWA: 2 ppm	(Vacated) TWA: 20 ppm (Vacated) TWA: 50 mg/m ³ TWA: 100 ppm TWA: 240 mg/m ³	IDLH: 400 ppm

Engineering Measures	Ensure adequate ventilation, especially in confined areas. Ensure that and safety showers are close to the workstation location. Use explosion electrical/ventilating/lighting equipment.
<u>Personal Protective Equipment</u>	
Eye/face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as OSHA's eye and face protection regulations in 29 CFR 1910.133 or EN166.
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure
Respiratory Protection	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved exposure limits are exceeded or if irritation or other symptoms are experienced
Recommended Filter type:	low boiling organic solvent. Type AX. Brown. conforming to EN371.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice

9. Physical and chemical properties

<u>Appearance</u>			
Physical State	Liquid		
Color	Colorless		
Odor	pungent		
Odor Threshold	No information available		
<u>Property</u>		<u>Values</u>	<u>Remarks</u> <u>• Method</u>
Melting Point/Range	-136 °C / -212.8 °F		
Softening Point	No data available		
Boiling Point/Range	44 - 46 °C / 111.2 - 114.8 °F		@ 760 mmHg
Flash Point	-29 °C / -20.2 °F		Method - No information available
Flammability (liquid)	Highly flammable		On basis of test data
Flammability (solid,gas)	Not applicable		Liquid
Explosion Limits	Lower 3.3 Vol% Upper 11.2 Vol%		
Autoignition Temperature	390 °C / 734 °F		
Decomposition Temperature	No data available		
pH	No information available		
Viscosity	0.34 mPa.s at 20 °C		
Water Solubility	3.6 g/L (20°C)		
Solubility in other solvents	No information available		
Partition Coefficient (n-octanol/water)			
Component		log Pow	
Allyl chloride		2.1	
Propylene oxide		1	
Vapor Pressure	395 mbar @ 20 °C		
Density / Specific Gravity	0.939		
Bulk Density	Not applicable		Liquid
Vapor Density	No information available		(Air = 1.0)
Particle characteristics	Not applicable (liquid)		

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	May form explosive peroxides.
Conditions to Avoid	Keep away from open flames, hot surfaces and sources of ignition. Exposed to light. Incompatible products. Exposure to moist air or water.
Incompatible Materials	Acids, Bases, Amines, Metals, Finely powdered metals
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂), Phosgene, Hydrogen cyanide
Hazardous Polymerization	Hazardous polymerization may occur.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Information on expected route of exposure

Inhalation	Not an expected route of exposure.
Ingestion	May be harmful if swallowed.
Eyes	Avoid contact with eyes. Irritating to eyes. Lachrymator (substance which causes tearing of tears).
Skin	Avoid contact with skin. May cause irritation.

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50
Allyl chloride	LD50 = 450 mg/kg (Rat)	LD50 = 2026 mg/kg (Rabbit)	LC50 = 9.5 mg/L (Rat)
Propylene oxide	LD50 = 382 mg/kg (Rat), OECD Guideline 401	LD50 = 950 mg/kg (Rabbit)	LC50 = 9.5 mg/L (Rat) OECD Guideline 401

Toxicologically Synergistic Products	No information available
(b) skin corrosion/irritation;	Category 2
(c) serious eye damage/irritation;	Category 2
(d) respiratory or skin sensitization;	
Respiratory	No data available
Skin	No data available
(e) germ cell mutagenicity;	Category 2
	Substances which cause concern for man owing to possible mutagenicity, where the available information is not adequate for making a satisfactory assessment.

Allyl chloride, stabilized

Revision

Propylene oxide	75-56-9	Group 2B	Reasonably Anticipated	A3	X
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IARC (International Agency for Research on Cancer)

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Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated

Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens

ACGIH: (American Conference of Governmental

Mexico - Occupational Exposure Limits - Carcinogen

A1 - Confirmed Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Confirmed Animal Carcinogen

A4 - Not Classifiable as a Human Carcinogen

A5 - Not Suspected as a Human Carcinogen

(g) reproductive toxicity; No data available

(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system.

(i) STOT-repeated exposure; Category 1

Target Organs Central nervous system (CNS), Liver, Kidney.

(j) aspiration hazard; No data available

Symptoms / effects,both acute and delayed Inhalation of high vapor concentrations may cause symptoms like headache, tiredness, nausea and vomiting.

Other Adverse Effects The toxicological properties have not been fully investigated.

Endocrine Disrupting Properties This product does not contain any known or suspected endocrine disruptors.

12. Ecological information

Ecotoxicity

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms.

Component	Freshwater Algae	Freshwater Fish	Microtox
Allyl chloride	Not listed	LC50: 41.03 - 67.02 mg/L, 96h static (Poecilia reticulata) LC50: 14.97 - 24.78 mg/L, 96h static (Pimephales promelas) LC50: 33.52 - 53.47 mg/L,	Not listed

Persistence and Degradability Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its volatility.

Component	log Pow
Allyl chloride	2.1
Propylene oxide	1

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is a hazardous waste. Chemical waste generators must also consult local, state, and national hazardous waste regulations to ensure complete and accurate disposal.

14. Transport information

DOT

UN-No UN1100
 Proper Shipping Name ALLYL CHLORIDE
 Hazard Class 3
 Subsidiary Hazard Class 6.1
 Packing Group I

TDG

UN-No UN1100
 Proper Shipping Name ALLYL CHLORIDE
 Hazard Class 3
 Subsidiary Hazard Class 6.1
 Packing Group I

IATA

UN-No UN1100
 Proper Shipping Name ALLYL CHLORIDE
 Hazard Class 3
 Subsidiary Hazard Class 6.1
 Packing Group I

IMDG/IMO

UN-No UN1100
 Proper Shipping Name ALLYL CHLORIDE
 Hazard Class 3
 Subsidiary Hazard Class 6.1
 Packing Group I

15. Regulatory Information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA
Allyl chloride	107-05-1	X	ACTIVE	
Propylene oxide	75-56-9	X	ACTIVE	

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS) (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS
Allyl chloride	107-05-1	X	-	203-457-6	X	X	X	X
Propylene oxide	75-56-9	X	-	200-879-2	X	X	X	X

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

U.S. Federal Regulations

SARA 313

Component	CAS No	Weight %	SARA 313 - Threshold Values %
Allyl chloride	107-05-1	>95	1.0 %
Propylene oxide	75-56-9	0.05-0.09	0.1 %

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for hazard classifications.

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants
Allyl chloride	X	1000 lb	-
Propylene oxide	X	100 lb	-

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors
Allyl chloride	X	
Propylene oxide	X	

OSHA - Occupational Safety and Health Administration

OSHA - United States Occupational Safety and Health Administration

Component	Specifically Regulated Chemicals	Highly Hazardous
Allyl chloride	-	TQ:

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

Component	Hazardous Substances RQs	CERCLA Extremely Hazardous Substances RQs
Allyl chloride	1000 lb	-
Propylene oxide	100 lb	100 lb

Component	Massachusetts	New Jersey	Pennsylvania	Illinois
Allyl chloride	X	X	X	X
Propylene oxide	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ): Y
 DOT Marine Pollutant Y
 DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product contains the following DHS chemicals:
Legend - STQs = Screening Threshold Quantities, APA = A placardeo

Component	DHS Chemical Facility Anti-Terror
Propylene oxide	Release STQs - 10000

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH (1907/2006) - Annex XVIII - Substances of Very High Concern
Allyl chloride	107-05-1	-	Use restricted. See entry 75. (see link for restriction details)	
Propylene oxide	75-56-9	-	Use restricted. See entry 28. (see link for restriction details) Use restricted. See entry 29. (see link for restriction details) Use restricted. See entry 75. (see link for restriction details)	

After the sunset date the use of this substance requires either an authorization or can only be used for exempt scientific research and development which includes routine analytics or use as intermediate.

REACH links

- <https://echa.europa.eu/authorisation-list>
- <https://echa.europa.eu/substances-restricted-under-reach>
- <https://echa.europa.eu/candidate-list-table>

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential

Other International Regulations

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	Rotterdam Convention (PIC)
Allyl chloride	107-05-1	Not applicable	Not applicable	Not applicable
Propylene oxide	75-56-9	5 tonne	50 tonne	Not applicable

16. Other Information

Prepared By Product stewardship (Regulatory Affairs)
 Thermo Fisher Scientific
 email - beigel.sdsdesk@thermofisher.com

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Revision Summary Updated to the U.S. Department of Labor’s Occupational Safety and Health (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (2024), May 20, 2024, effective July 19, 2024.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information available at the date of its publication. The information given is designed only as a guidance for safe handling, use, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. This information relates only to the specific material designated and may not be valid for such material used in combination with other materials or in any process, unless specified in the text

End of SDS