

Revision Date 03-May-2012

Revision Number 2

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

Product Identifier

Product Description: Chlorosulfonyl isocyanate
Cat No. 162040000; 162040050; 162040500; 162042500
Synonyms CSI

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

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
 Janssen Pharmaceuticaaan 3a
 2440 Geel, Belgium

E-mail address begele.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300
 CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Skin Corrosion/Irritation	Category 1 B
Respiratory Sensitization	Category 1
Skin Sensitization	Category 1

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

Symbol(s) C - Corrosive
R-phrases R14 - Reacts violently with water
 R29 - Contact with water liberates toxic gas
 R34 - Causes burns

Risk Combination Phrases R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed
 R42/43 - May cause sensitization by inhalation and skin contact

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SECTION 2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

- H332 - Harmful if inhaled
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H317 - May cause an allergic skin reaction
- H312 - Harmful in contact with skin
- H302 - Harmful if swallowed
- H314 - Causes severe skin burns and eye damage
- EUH029 - Contact with water liberates toxic gas
- EUH014 - Reacts violently with water

Precautionary Statements - EU (§28, 1272/2008)

- 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
- P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
- P304 + P341 - IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
- P402 + P404 - Store in a dry place. Store in a closed container

Other Hazards

Lachrymator (substance which increases the flow of tears).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Sulfuryl chloride isocyanate 1189-71-5	EEC No. 214-715-2	98	1189-71-5	R14 Xn; R20/21/22 R29 C; R34 R42/43	Skin Corr. 1B (H314) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) (EUH014) (EUH029)	-
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For the full text of the R-phrases and H-Statements mentioned in this Section, see [Section 16](#)

SECTION 4. FIRST AID MEASURES
Description of first aid measures
Eye Contact

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

Ingestion

Do not induce vomiting. Call a physician immediately.

Inhalation

Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required.

Notes to Physician

Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES
Extinguishing media
Suitable Extinguishing Media

Carbon dioxide (CO₂). Dry chemical. chemical foam.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

Advice for fire-fighters

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As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.. Do not let this chemical enter the environment.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use only in area provided with appropriate exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Keep in a dry place. Keep container tightly closed. Corrosives area. Keep under nitrogen. Keep refrigerated.

Specific End Uses

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Component
Sulfonyl chloride
isocyanate

European Union	The United Kingdom	France	Belgium	Spain
	STEL: 0.07 mg/m ³ 15 min TWA: 0.02 mg/m ³ 8 hr			

Component
Sulfonyl chloride
isocyanate

Austria	Denmark	Switzerland	Poland	Norway
		STEL: 0.02 mg/m ³ 15 Minuten MAK: 0.02 mg/m ³ 8 Stunden		

Biological limit values

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

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Derived No Effect Level (DNEL) No information available.
Predicted No Effect Concentration (PNEC) No information available.

Exposure controls

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

Personal protective equipment

Eye Protection Goggles
Hand Protection Protective gloves
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 European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice
Environmental exposure controls No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear
odor	pungent
pH	No information available.
Vapor Pressure	25.6 hPa @ 20 °C
Vapor Density	4.88
Viscosity	0.996 mPa.s at 20 °C
Boiling Point/Range	106°C / 222.8°F
Melting Point/Range	-44°C / -47.2°F
Decomposition temperature	> 300°C
Flash Point	> 110°C / > 230°F
Autoignition Temperature	No information available.
Water Solubility	reacts
Specific Gravity	1.626
Molecular Formula	C Cl N O3 S
Molecular Weight	141.53

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Moisture sensitive. Air sensitive.

Possibility of Hazardous Reactions

Hazardous Polymerization No information available.
Hazardous Reactions . No information available.

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Conditions to Avoid

Excess heat, Exposure to air, Incompatible products, Exposure to moist air or water.

Incompatible Materials

Water, Strong oxidizing agents, Strong bases, Alcohols, Amines.

Hazardous Decomposition ProductsHydrogen chloride gas. Nitrogen oxides (NO_x). Carbon monoxide (CO). Carbon dioxide (CO₂). Sulfur oxides. Hydrogen cyanide (hydrocyanic acid).**SECTION 11. TOXICOLOGICAL INFORMATION****Information on Toxicological Effects****Acute Toxicity****Product Information**

No acute toxicity information is available for this product

Component Information**Chronic Toxicity****Carcinogenicity**

There are no known carcinogenic chemicals in this product

Sensitization

May cause sensitization by inhalation and skin contact

Mutagenic Effects

Not mutagenic in AMES Test

Reproductive Effects

No information available.

Developmental Effects

No information available.

Target Organs

No information available.

Other Adverse Effects

The toxicological properties have not been fully investigated.

Endocrine Disruptor Information

None known

SECTION 12. ECOLOGICAL INFORMATION**Toxicity****Ecotoxicity effects**

Do not empty into drains

Persistence and degradability

No information available

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Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment

Other adverse effects

No information available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues / Unused Products Dispose of in accordance with local regulations

Contaminated Packaging Empty containers should be taken to local recyclers for disposal

SECTION 14. TRANSPORT INFORMATION

IMDG/IMO

UN-No	3265
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	II
Proper Shipping Name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

ADR

UN-No	3265
Hazard Class	8
Packing Group	II
Proper Shipping Name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

IATA

UN-No	3265
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	II
Proper Shipping Name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.*

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SECTION 15. REGULATORY INFORMATION
Safety, health and environmental regulations/legislation specific for the substance or mixture
International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Sulfuryl chloride isocyanate	214-715-2	-		X	-	X	X	X	X	X	X

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

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment
SECTION 16. OTHER INFORMATION
Full text of R-phrases referred to under sections 2 and 3

R14 - Reacts violently with water

R29 - Contact with water liberates toxic gas

R34 - Causes burns

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

R42/43 - May cause sensitization by inhalation and skin contact

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Revision Summary
Reason for revision Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006
Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet



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