SAFETY DATA SHEET



Revision Date 16-Nov-2010

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier	
Product Description:	
Cat No.	
Synonyms	

Crotyl chloride 154800000; 154801000; 154805000 1-Chloro-2-butene

Relevant identified uses of the substance or mixture and uses advised againstRecommended UseLaboratory chemicalsUses advised againstNo Information available

 Details of the supplier of the safety data sheet

 Company

 Acros Organics BVBA

 Janssen Pharmaceuticalaan 3a

 2440 Geel, Belgium

 E-mail address
 begel.sdsdesk@thermofisher.com

 Emergency Telephone Number

 For information in the US, call: 800-ACROS-01

 For information in Europe, call: +32 14 57 52 11

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

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

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4
Skin Corrosion / irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Specific target organ systemic toxicity (single exposure)	Category 3
Flammable liquids.	Category 2

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

 For the full text of the R phrases mentioned in this Section, see Section 16

 Symbol(s)
 F - Highly flammable

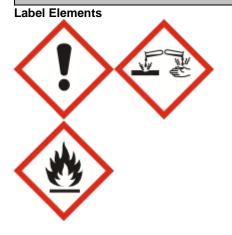
 C - Corrosive

 R -phrase(s)
 R11 - Highly flammable

 R22 - Harmful if swallowed

R34 - Causes burns

2. HAZARDS IDENTIFICATION



Signal Word

Danger

Hazard Statements

- H335 May cause respiratory irritation
- H302 Harmful if swallowed
- H318 Causes serious eye damage
- H314 Causes severe skin burns and eye damage
- H225 Highly flammable liquid and vapor

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

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

P280 - Wear eye protection/face protection

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

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

- P301+ P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking

P240 - Ground/Bond container and receiving equipment

Other Hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
1-Butene, 3-chloro-	EEC No. 209- 252-8	23-38		F; R11 Xn; R22 Xi; R36/37/38;	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302)	
1-Crotyl chloride	EEC No. 209- 739-5	65		F; R11 Xn; R22 C; R34	Skin Corr. 1B (H314) Acute Tox. 4 (H302)	

For the full text of the R phrases mentioned in this Section, see Section 16

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 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

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

Flammable

Advice for fire-fighters

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

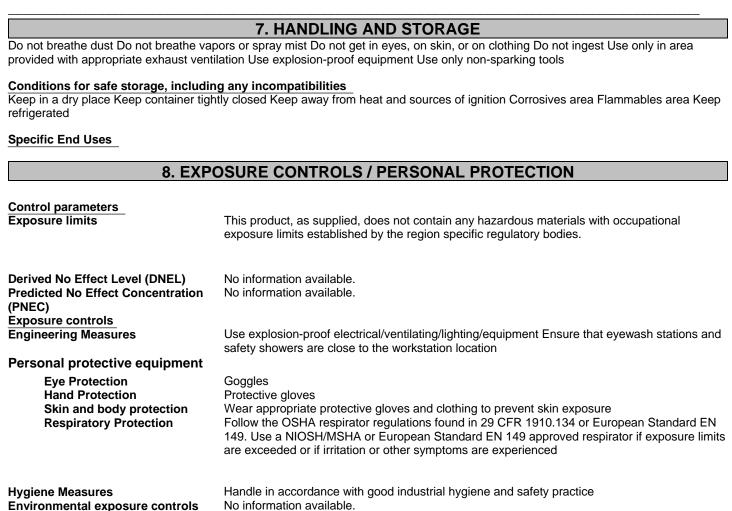
Prevent further leakage or spillage if safe to do so

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 and closed containers for disposal Remove all sources of ignition Use spark-proof tools and explosion-proof equipment Do not let this chemical enter the environment

7. HANDLING AND STORAGE

Precautions for Safe Handling



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Appearance odor pH Boiling Point/Range Melting Point/Range Flash Point Water Solubility Specific Gravity Molecular Formula Molecular Weight Liquid Colorless irritating 3 80 - 85°C / 176 - 185°F@ 760 mmHg -65°C / -85°F -15°C / 5°F +/- 14 g/L (20°C) 0.920 C4 H7 Cl 90.55

10. STABILITY AND REACTIVITY

Reactivity Chemical Stability Stable under normal conditions

Possibility of Hazardous Reactions

ACR15480 - Crotyl chloride

Hazardous Polymerization Hazardous Reactions .

Hazardous polymerization does not occur. No information available.

Conditions to Avoid

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

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products

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

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 Mutagenic Effects Reproductive Effects Developmental Effects Target Organs Other Adverse Effects Endocrine Disruptor Information	No information available. No information available No information available. No information available. No information available. The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information None known

12. ECOLOGICAL INFORMATION

Toxicity Ecotoxicity effects

Do not empty into drains

Persistence and degradability
No information available
Bioaccumulative potential
No information available.
Mobility in soil
No information available.
Results of PBT and vPvB assessment
Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods Waste from Residues / Unused	Dispose of in accordance with local regulations
Products Contaminated Packaging	Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

IMDG/IMO

UN-No	2924
Hazard Class	3
Subsidiary Hazard Class	8
Packing Group	II

ADR

UN-No	2924
Hazard Class	3
Subsidiary Class	8
Packing Group	II

IATA

UN-No	2924
Hazard Class	3
Subsidiary Hazard Class	8
Packing Group	II

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
1-Butene, 3-chloro-	209-252-8	-		Х	-	Х	Х	Х	-	-	-
1-Crotyl chloride	209-739-5	-		Х	-	Х	Х	Х	Х	Х	-

<u>Legend</u>

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

EINECS/ELINCS - European Inventory Lists

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

16. OTHER INFORMATION

Text of R phrases mentioned in Section 2-3 R11 - Highly flammable R22 - Harmful if swallowed R34 - Causes burns

 Revision Date
 16-Nov-2010

 Revision Summary
 Not applicable

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

 Disclaimer

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End of Safety Data Sheet