



SAFETY DATA SHEET

Creation Date 07-Sep-2009

Revision Date 11-Nov-2010

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Description: (R)-(+)-4-(Chloromethyl)-2,2-dimethyl-1,3-dioxolane
Cat No. 399220000; 399220010; 39922050

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 bege1.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 3
Skin Corrosion / irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 1
Specific target organ systemic toxicity (single exposure)	Category 3
Flammable liquids.	Category 3

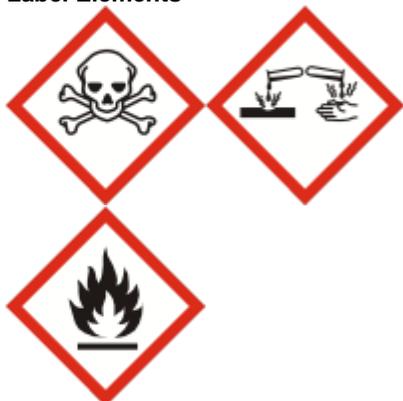
Classification according to EU Directives 67/548/EEC or 1999/45/EC

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

Symbol(s) T - Toxic
R -phrase(s) R10 - Flammable
R25 - Toxic if swallowed
R41 - Risk of serious damage to eyes
Risk Combination Phrases R36/37/38 - Irritating to eyes, respiratory system and skin

2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

- H301 - Toxic if swallowed
- H318 - Causes serious eye damage
- H335 - May cause respiratory irritation
- H315 - Causes skin irritation
- H226 - Flammable liquid and vapor

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

- P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- 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
- P302+ P352 - IF ON SKIN: Wash with plenty of soap and water
- P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Other Hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
(R)-(+)-4-(Chloromethyl)-2,2-dimethyl-1,3-dioxolane		>95	57044-24-3	R10 T; R25 Xi; R36/37/38 Xi; R41;	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Eye Irrit. 2 (H319) Acute Tox. 3 (H301)	

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	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 Immediate medical attention is required
Ingestion	Do not induce vomiting Call a physician or Poison Control Center immediately
Inhalation	Move to fresh air If breathing is difficult, give oxygen Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device Immediate medical attention is required
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
Cool closed containers exposed to fire with water spray

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Flammable
Containers may explode when heated
Vapors may form explosive mixtures with air
Vapors may travel to source of ignition and flash back

Advice for fire-fighters

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment
Keep people away from and upwind of spill/leak
Evacuate personnel to safe areas
Remove all sources of ignition
Take precautionary measures against static discharges

Environmental precautions

Should not be released into the environment

Methods and material for containment and cleaning up

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

7. HANDLING AND STORAGE

Precautions for Safe Handling

7. HANDLING AND STORAGE

Use only under a chemical fume hood Wear personal protective equipment Do not get in eyes, on skin, or on clothing Keep away from open flames, hot surfaces and sources of ignition Use only non-sparking tools Use explosion-proof equipment Do not breathe vapors/dust Do not ingest Take precautionary measures against static discharges

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place Flammables area Keep away from heat and sources of ignition

Specific End Uses

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure limits

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

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls

Engineering Measures

Use only under a chemical fume hood Ensure that eyewash stations and safety showers are close to the workstation location Use explosion-proof electrical/ventilating/lighting/equipment

Personal protective equipment

Eye Protection

Safety glasses with side-shields

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Liquid

pH

No information available.

Boiling Point/Range

63°C / 145.4°F @ 37 mmHg

Melting Point/Range

No information available.

Flash Point

51°C / 123.8°F

Specific Gravity

1.103

Molecular Formula

C6 H11 Cl O2

Molecular Weight

150.60

10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization

Hazardous polymerization may occur.

Hazardous Reactions .

None under normal processing..

Conditions to Avoid

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

Incompatible Materials

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

Hazardous Decomposition Products

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

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

No information available.

Mutagenic Effects

No information available

Reproductive Effects

No information available.

Developmental Effects

No information available.

Target Organs

None known.

Other Adverse Effects

The toxicological properties have not been fully investigated.

Endocrine Disruptor 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

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION**IMDG/IMO**

UN-No	UN1992
Hazard Class	3
Subsidiary Hazard Class	6.1
Packing Group	III
Proper Shipping Name	Flammable liquid, toxic, n.o.s

ADR

UN-No	UN1992
Hazard Class	3
Subsidiary Class	6.1
Packing Group	III
Proper Shipping Name	Flammable liquid, toxic, n.o.s

IATA

UN-No	UN1992
Hazard Class	3
Subsidiary Hazard Class	6.1
Packing Group	III
Proper Shipping Name	Flammable liquid, toxic, n.o.s

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

16. OTHER INFORMATION

Text of R phrases mentioned in Section 2-3

R10 - Flammable

R25 - Toxic if swallowed

R41 - Risk of serious damage to eyes

R36/37/38 - Irritating to eyes, respiratory system and skin

Revision Date 11-Nov-2010

Revision Summary Not applicable

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

Disclaimer

The information provided on this SDS 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