

Revision Date 24-Nov-2010

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Description: L(-)-Epinephrine
Cat No. 204400000; 204400050
Synonyms Adrenaline; Epinephrine; I-3,4-Dihydroxy-\$1-(methylaminomethyl)benzyl alcohol

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 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 3
Acute dermal toxicity	Category 3
Acute Inhalation Toxicity - Dusts and Mists	Category 3
Skin Corrosion / irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Specific target organ systemic toxicity (single exposure)	Category 3
Specific target organ systemic toxicity (repeated exposure)	Category 2
Chronic aquatic toxicity	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) R33 - Danger of cumulative effects
Risk Combination Phrases R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed
 R36/37/38 - Irritating to eyes, respiratory system and skin
 R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

H315 - Causes skin irritation
 H331 - Toxic if inhaled
 H301 - Toxic if swallowed
 H311 - Toxic in contact with skin
 H319 - Causes serious eye irritation
 H335 - May cause respiratory irritation
 H412 - Harmful to aquatic life with long lasting effects
 H373 - May cause damage to organs through prolonged or repeated exposure

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

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell
 P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and water
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P273 - Avoid release to the environment
 P302+ P352 - IF ON SKIN: Wash with plenty of soap and water
 P280 - Wear protective gloves/protective clothing/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

Other Hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
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3. COMPOSITION/INFORMATION ON INGREDIENTS

1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl] 51-43-4	EEC No. 200-098-7	99	51-43-4	T; R23/24/25 R33 Xi; R36/37/38 R52/53	STOT SE 3 (H335) STOT RE 2 (H373) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Aquatic Chronic 3 (H412)	-
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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 Obtain medical attention

Skin Contact

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

Ingestion

Call a physician immediately Clean mouth with water

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

Water spray 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

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

6. ACCIDENTAL RELEASE MEASURES

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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

Sweep up or vacuum up spillage and collect in suitable container for disposal

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, cool and well-ventilated place Keep container tightly closed Keep under nitrogen Keep refrigerated

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

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Powder, Solid

Appearance

Beige

odor

odorless

pH

No information available.

Boiling Point/Range

No information available.

Melting Point/Range

208 - 211°C / 406.4 - 411.8°F

Decomposition temperature

> 212°C

Flash Point

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Water Solubility	sparingly soluble
Molecular Formula	C9 H13 N O3
Molecular Weight	183.21

10. STABILITY AND REACTIVITY

Reactivity**Chemical Stability**

Air sensitive. Light sensitive.

Possibility of Hazardous Reactions**Hazardous Polymerization**

Hazardous polymerization does not occur.

Hazardous Reactions .

No information available.

Conditions to Avoid

Exposure to air, Exposure to light, Incompatible products.

Incompatible Materials

Acids, Acid chlorides.

Hazardous Decomposition ProductsNitrogen oxides (NOx). 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**Component**

1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]

	LD50 Oral	LD50 Dermal	LC50 Inhalation
		62 mg/kg (Rat)	

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

No information available.

Other Adverse Effects

The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information

Endocrine Disruptor Information

None known

12. ECOLOGICAL INFORMATION

Toxicity**Ecotoxicity effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

Persistence and degradability

Not readily biodegradable

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 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	2811
Hazard Class	6.1
Packing Group	II
Proper Shipping Name	TOXIC SOLID, ORGANIC, N.O.S.

ADR

UN-No	2811
Hazard Class	6.1
Packing Group	II
Proper Shipping Name	TOXIC SOLID, ORGANIC, N.O.S.

IATA

UN-No	2811
Hazard Class	6.1
Packing Group	II
Proper Shipping Name	TOXIC SOLID, ORGANIC, N.O.S.*

15. REGULATORY INFORMATION

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

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]	200-098-7	-		X	X	-	X	X	X	X	-

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****Text of R phrases mentioned in Section 2-3**

R33 - Danger of cumulative effects

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed

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

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Revision Date 24-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