

HUVEC – Human Umbilical Vein Endothelial Cells

Version 2.0

SDS Number: 00000029809

Revision Date: 2016.11.29

SECTION 1. IDENTIFICATION

Product name : HUVEC – Human Umbilical Vein Endothelial Cells
Material number : CC-2519
Product code : 00000029809

Manufacturer or supplier's details

Company : **Lonza Ltd**
Muenchensteinerstrasse 38
CH-4002 Basel
Switzerland
Business Telephone +41 61 316 81 11

Lonza Inc. - Rockland
191 Thomaston Street
Rockland, ME 04841-2994
USA
Business Telephone: 1-207-594-3400

Lonza Inc. - Walkersville
8830 Biggs Ford Road
Walkersville, MD 21793-0127
USA
Business Telephone 1-301-898-7025

E-mail address : prodinfo@lonza.com
Emergency telephone number : +41 61 313 94 94 (24h)

Recommended use of the chemical and restrictions on use

Recommended use : For Research Use Only. Not for use in diagnostic procedures.

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Not a hazardous substance or mixture according to US Regulation 29 CFR 1910.1200

GHS label elements

Not a hazardous substance or mixture according to US Regulation 29 CFR 1910.1200

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (%)
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Dimethyl sulfoxide	67-68-5	10.00
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SECTION 4. FIRST AID MEASURES

- If inhaled : No special precautions required.
- In case of skin contact : Wash with water and soap as a precaution.
If skin irritation persists, call a physician.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
If eye irritation persists, consult a specialist.
- If swallowed : Immediately give large quantities of water to drink.
Do not induce vomiting without medical advice.
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : No information available.
- Notes to physician : No information available.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray
Dry powder
Foam
- Specific hazards during firefighting : Heating or fire can release toxic gas.
- Further information : Use water spray to cool unopened containers.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions
- General advice : Prevent product from entering drains.
- Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : No special precautions required.

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Conditions for safe storage : No special storage conditions required.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Dimethyl sulfoxide	67-68-5	TWA	250 ppm	WEEL

Appropriate engineering controls

Engineering measures : Avoid splashes.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection

Remarks : Wear suitable gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection : Tightly fitting safety goggles

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
No special protective equipment required.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Aqueous solution

Colour : no data available

Odour : no data available

Odour Threshold : no data available

pH : no data available

Freezing point : no data available

Boiling point/boiling range : no data available

Flash point : does not flash

Evaporation rate : no data available

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Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	no data available
Relative vapour density	:	no data available
Relative density	:	no data available
Density	:	no data available
Solubility(ies)		
Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Decomposition temperature	:	no data available
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	no data available

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	:	Stable under normal conditions.
Conditions to avoid	:	no data available
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products	:	No decomposition if stored normally.

SECTION 11. TOXICOLOGICAL INFORMATION**Carcinogenicity****IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Further information

Remarks: No data is available on the product itself.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

Toxicity to fish : Remarks: no data available

Persistence and degradability

Biodegradability : Result: no data available

Bioaccumulative potential

Bioaccumulation : Remarks: no data available

Components:**Dimethyl sulfoxide**

Partition coefficient: n-octanol/water : log Pow: -1.35

Mobility in soil

Distribution among environmental compartments : Remarks: no data available

Other adverse effects

Results of PBT and vPvB assessment : This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential : Regulation: US. EPA Clean Air Act (CAA) Section 602 Ozone-Depleting Substances (40 CFR 82, Subpt. A, App A & B)
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : no data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Can be disposed as waste water, when in compliance with local regulations.

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SECTION 14. TRANSPORT INFORMATION**IATA** Not dangerous goods

UN number : Not applicable
Proper shipping name : Not applicable
Transport hazard class : Not applicable
Packing group : Not applicable
Environmental hazards : no

IMDG Not dangerous goods

UN number : Not applicable
Proper shipping name : Not applicable
Transport hazard class : Not applicable
Packing group : Not applicable
Environmental hazards : Marine pollutant: no

ADR Not dangerous goods

UN number : Not applicable
Proper shipping name : Not applicable
Transport hazard class : Not applicable
Packing group : Not applicable
Environmental hazards : no

RID Not dangerous goods

UN number : Not applicable
Proper shipping name : Not applicable
Transport hazard class : Not applicable
Packing group : Not applicable
Environmental hazards : no

DOT Not dangerous goods

UN number : Not applicable
Proper shipping name : Not applicable
Transport hazard class : Not applicable
Packing group : Not applicable
Environmental hazards : no

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TDG	:	Not dangerous goods
UN number	:	Not applicable
Proper shipping name	:	Not applicable
Transport hazard class	:	Not applicable
Packing group	:	Not applicable
Environmental hazards	:	no
Special precautions for user	:	none
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	:	Not applicable

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Ethanol	64-17-5	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Selenious acid	7783-00-8	10	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards

See above: SECTION 2. Hazard Identification-GHS Classification

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

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This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMII Intermediate or Final VOC's (40 CFR 60.489):

Components	CAS-No.	Concentration
Dimethyl sulfoxide	67-68-5	10 - 20 %

Clean Water Act

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Components	CAS-No.	Component RQ (lbs)
Acetic acid	64-19-7	5000
Zinc sulfate heptahydrate	7446-20-0	1000
Iron(II) sulfate heptahydrate	7782-63-0	1000
Copper(II) sulfate pentahydrate	7758-99-8	10

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Components	CAS-No.	Concentration
Acetic acid	64-19-7	< 0.0001 %
Zinc sulfate heptahydrate	7446-20-0	< 0.0001 %
Iron(II) sulfate heptahydrate	7782-63-0	< 0.0001 %
Copper(II) sulfate pentahydrate	7758-99-8	< 0.0001 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Components	CAS-No.
Water	7732-18-5
Fetal Bovine Serum	Not Assigned
Dimethyl sulfoxide	67-68-5

New York City Hazardous Substances

No components listed on the New York City Hazardous Substances List

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Components	CAS-No.
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Streptomycin sulphate

3810-74-0

SECTION 16. OTHER INFORMATION

Product should be handled at the Biological Safety Level 2 to minimize exposure of potentially infectious products, as recommended in the CDC-NIH Manual, "Biosafety in Microbiological and Biomedical laboratories".

WARNING: This product contains human source material, treat as potentially infectious.

Frozen cell culture suspension contains Dimethyl sulfoxide (DMSO).

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