Guideline 3.1 November 2015

Product: Defined Endothelial Cell Growth Kit

Revision Date: 12/2018

Date of legal validity: 01.12.2018

Replaces Version 1.0

Safety Data Sheet (SDS)

Section 1.

PRODUCT AND COMPANY IDENTIFICATION

1.1 PRODUCT IDENTIFICATION

Substance name / Trade name / Product classification

Index-No.: / EG-No.: Defined Endothelial Cell Growth Kit

Catalogue-Number: XF501 - 0500

EG-No.: None CAS-No.: None

REACH-Registration No.: A registration number for this substance is not available because the substance or its use is excluded

from registration

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Product usage:

Growth medium for the purpose of in vitro cell cultivation in biomedical research

Product usage which is not allowed:

Growth medium for the purpose of in vitro cell cultivation in biomedical research

1.3 SUPPLIER IDENTIFICATION WHO IS RESPONSIBLE FOR THE MSDS

Producer / Supplier: TNCbio BV

High Tech campus 29 5656 AE Eindhoven The Netherlands

Produced for TNCbio BV by: PELOBIOTECH GmbH

1.4 EMERGENCY NUMBER

General Emergency: 112



TNC BIO BV

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Section 2.

HAZARDS IDENTIFICATION

In generall the product contains no substances that are at the current scientific knowledge known to be at their given concentrations potentially biohazardous. But note that all cell culture products have to be handeled with care. NOT FOR CLINICAL, DIAGNOSTIC OR THERAPEUTIC PROCEDURES. DO NOT USE IN HUMANS.

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE OF SUBSTANCES

Classification corresponding to regulation (EG) Nr. 1272/2008:

This product contains no substances that are relevant for registration according to CLP- guidline.

2.2 ELEMENTS OF DEFINITE DESCRIPTION Elements of definite description corresponding to regulation (EG) Nr. 1272/2008 like a Pictogram:

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

Special marking word: None necessary
Hazardous components for the labeling contains:
Hazard note, security advice
For in vitro use only

2.3 OTHER RISKS / HAZARDSNONE

Section 3.

COMPOSITION/SPECIFICATIONS ABOUT COMPONENTS

The present product is a mixture that contains no hazardous substances.

3.1 SUBSTANCES

Containing components:

Contains salts, vitamins, Protein components

3.2 MIXTURE

Classification corresponding to regulation (EG) Nr. 1272/2008:

No components have to be notified in detail in accordance with the relevant legislation.

Section 4.

FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES General advice:

Thoroughly rinse / clean contaminated clothing and equipment with water. There are no health problems to be expected. If you still have any health problems, then please consult a doctor.

After contact to eye:

Remove contact lenses. In any case, thoroughly rinse eyes with water and seek medical attention immediately.

After Swallowing:

Rinse mouth with water and make sure the person is conscious. See a doctor immediately **After Inhalation:**

Go to the fresh air. When breathing gets heavy, give oxygen. See a doctor immediately.

After Skin contact:

Rinse affected skin areas with plenty of water and wash with soap and water. Take off contaminated clothing and shoes. Call a doctor if irritation or discomfort occurs.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

There are none known. If you still have any health problems, then please consult a doctor

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

The doctor should contact us if necessary

Section 5.

MEASURES FOR FIREFIGHTING

None of the components of this product pose a major hazard in the event of a fire. The firefighting agents should be selected according to the other materials on fire. It is recommended that firefighters wear protective clothing and respiratory equipment.

5.1 FIRE EXTINGUISHING MEDIA Appropriate and inappropriate:

Since it is an aqueous solution, no extinguishing agents are required.

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5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Can emit toxic fumes under fire conditions.

5.3 ADVICE FOR FIREFIGHTERS

The firefighting should be based on the other aflamed and flammable interior, components and substances of the rooms

Section 6.

ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Eye protection:

Wear protection glases

Body protection:

Wear suitable protective clothing as splash and contamination protection

Protective gloves:

Use protective gloves made of plastic or rubber that withstand chemicals.

Inhalation protection:

Not necessary

Air ventilation:

Not necessary

Other protecive equipment:

Laboratory shower and eye wash station

6.2 ENVIRONMENTAL PRECAUTIONS

General advice:

There are no environmentally harmful effects known in the amount of substance present in the mixture.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING

General advice:

Dispose of in accordance with local authority regulations. The waste code number according to the Waste Catalog Ordinance (AVV) depends on the waste producer and can therefore be different for a product. The waste code number is to be determined therefore of each waste producer separately. The allocation of waste code numbers according to the EAV is to be performed sector- and process- specific.

6.4 REFERENCE TO OTHER SECTIONS

See section 12 and 13

Section 7.

HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Avoid contact with eyes, skin, mucous membranes and clothing. Always work under a laminar flow with object and personal protection.

Measures to protect against fire and explosions:

Not necessary

Measures to prevent dusts and aerosols:

Not required for proper and according to regulations use

Measures to protect the environment:

Not required for proper and according to regulations use

General hygiene measures:

Since the mixture is sterile, it should be treated in accordance with the guidelines for sterile work in a laboratory (GLP, Chemistry law§ 19a to 19d) in order to maintain this condition

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Information on storage conditions:

Keep container tightly closed in a dry room. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temp.:

2-8°C for Basal Medium

-20°C for Supplement Kit

Requirements for storage rooms and containers:

Refrigerators are required.

Assembling with the following substances is prohibited:

Medicines, food and feed and solvents that can damage the containers.

Specific Endusing:

Information for this must be taken from the data sheet / product information.

Section 8.

EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Components with workplace control parameters are not available fort hat mixture

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8.2 EXPOSURE CONTROLS AND MONITORING

- Protection equipment Body Protection
- Skin protection
- Eye/face protection
- Respiratory protection Heat- and coldness

protection

Use impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure and protection Control of environmental exposure and protection (See Point 6.2)

Section 9.

INFORMATION ON BASIC PHYSICAL AND CHEMICAL **PROPERTIES**

6.1 PERSONAL PRECAUTIONS, PROTECTIVE **EQUIPMENT AND EMERGENCY PROCEDURES**

Appearence Form: liquid

odour threshhold: reddish / pale colour: reddish / pale

pH: 7,2-7,5 **Boiling point:** 100 °C Melting point/freezing point:

0°C / -2°

No data available Flashpoint: No data available **Evapouration rate:** No data available Flammability: Upper/lower flammability or explosive limits:

No data available

No data available Oxidative properties: Self inflammability: No data available Vapour pressure: No data available No data available Vapour density: **Relative Density:** No data available

Fully miscible with water Water Solubility:

Partition coefficient: noctanol/ water:

No data available

Auto-ignition temperature: No data available No data available Decomposition temperature: Viscosity: No data available

Explosive Properties:

No data available oxidative Properties:

9.2 OTHER SAFETY INFORMATION

No data available

Section 10.

STABILITY AND REACTIVITY

10.1 REACTIVITY

Reacts slowly with oxygen and UV-Light

10.2 CHEMICAL STABILITY

The mixture is stable under the recommended storage conditions named at Section 7

10.3 POSSIBILITY OF HAZARDOUS REACTIONS no data available

10.4 CONDITIONS TO AVOID

Long lasting worming or heating and long lasting exposure to UV-light

10.5 INCOMPATIBLE MATERIALS

Strong oxidizing agents

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

no data available - In an event of fire: see section 5

Section 11.

TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

acute Toxicity:

intravenous LD50 145 mg/kg(Rat)

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Skin corrosion/irritation:

no data available

Serious eye damage/eye irritation:

no data available

Respiratory or skin sensitisation:

no data available

Germ cell mutagenicity:

no data available

Carcinogenicity:

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.

Reproductive toxicity:

no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure:

no data available

Aspiration hazard: no data available

11.2 SYMPTOMS AND EFFECTS (DELAYED AND CHRONIC) WITH DATA ON THE EXPOSURE ROUTES ALSO: INFORMATION ON TOXICOKINETICS,

METABOLISM AND DISTRIBUTION

Not available for BSA and Transferrin RTECS number for Insulin: NM8900250

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated yet.

Section 12.

ECOLOGICAL INFORMATION

12.1 TOXICITY

no data available

12.2 PERSISTENCE AND DEGRADABILITY

no data available

12.3 BIOACCUMULATIVE POTENTIAL

no data available

12.4 MOBILITY IN SOIL

no data available

12.5 RESULTS OF PBT AND VPVB ASSESSMENT

PBT: assessment not available as chemical safety assessment not required/not conducted vPvB: assessment not available as chemical safety assessment not required/not conducted

12.6 OTHER ADVERSE EFFECTS

no data available

Section 13.

Replaces Version 1.0

WASTE TREATMENT METHODS

13.1 WASTE TREATMENT METHODS

Can be disposed of according to workplace quidelines.

Must not be disposed together with household garbage. Do not empty into drains.

Dispose of in accordance with local authority regulations.

The waste code number according to the Waste Catalog Ordinance depends on the waste producer and can therefore be different for a product. The waste code number must therefore be assigned by each waste generator to be determined separately.

The allocation of waste code numbers according to the EAV is sector- and process-specific to perform.

It always applies:

Please follow the common rules for biological materials and dispose of the product accordingly. Best is to offer surplus and non- recyclable solutions to a licensed disposal company.

Treatment of contaminated packaging:

Dispose of in accordance with local authority regulations.

The waste code number according to the Waste Catalog Ordinance depends on the waste producer and can therefore be different for a product. The waste code number is therefore to be determined by each waste producer separately.

The allocation of waste code numbers according to the EAV has to be performed sector- and process-specific.

Waste code number according to the Waste Catalog Ordinance:

150102, 150106, 160119, 160509, 180206

Special Safty measures:

no data available

relevant EU- or other provisions:

no data available

Section 14.

TRANSPORT INFORMATION

14.1 UN-NUMBER

Not mentioned in the list

According to Regulation (EG) Nr. 1907/2006(REACH) According ECHA Date of legal validity: 01.12.2018

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14.2 UN PROPER SHIPPING NAME

No dangerous goods

14.3 ADR/RID

Not dangerous goods

14.4 IMDG-CODE / ICAO-TI / IATA-DGR

Not dangerous goods

14.5 TRANSPORT HAZARD CLASS(ES)

Not mentioned in the list

14.6 PACKAGING GROUP

14.7 ENVIRONMENTAL HAZARDS

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.8 ENVIRONMENTAL HAZARDS

no data available

14.9 SPECIAL PRECAUTIONS FOR USER

The product is not subject to any transport restrictions

Section 15.

REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL **REGULATIONS/LEGISLATION SPECIFIC FOR THE** SUBSTANCE OR MIXTURE

For the mixture no EC regulations are known. It is exempt from special labeling.

15.2 CHEMICAL SAFETY ASSESSMENT

For this product a chemical safety assessment was not carried out

Section 16.

REGULATORY INFORMATION

Information Leaflets:

Guidance on the preparation of safety data sheets of ECHA; Version 3.1 FC Directive 67/548 / FC or 99/45 / FC as amended.

Regulation (EC) No. 1907/2006 (REACH), 1272/2008 (CLP), as amended. EC Directives 2000/39 / EC, 2006/15 / EC, 2990/161 / EC

National occupational exposure limit lists of the respective countries in the currently valid version. Transport regulations according to ADR, RID, IMDG, IATA in the currently valid version. Data sources used to obtain physical, toxicological and ecotoxicological data,

are indicated directly in the respective sections. Other information:

This product is for research use only and may not be used for human or animal testing. It should be used by staff who can handle biological reagents and are well trained in good laboratory practice.

The above information and hints are believed to be correct in our current knowledge, but are not exhaustive and are intended for experienced employees and only as a guide. However, they do not constitute an assurance of Product properties and constitute no contractual legal relationship. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product TNCbio BV is not responsible for any damage and shall not be held liable in any case resulting from the use or contact with the above product. The burden of safety when using this material lies solely with the user. We also reserve the right to periodically revise this SDS as new information becomes available.