

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Cryo Rabbit Hepatocytes

Version 2.0 Revision Date 07.12.2018 Print Date 10.03.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : Cryo Rabbit Hepatocytes

Material number : NZCS01

Synonyms : Cryo Rabbit (NZ White) Hpctyes, Suspn..

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Scientific research and development

1.3 Details of the supplier of the safety data sheet

Company : Lonza Ltd

Muenchensteinerstrasse 38 CH-4002 Basel, Switzerland

Business Telephone: +41 61 316 81 11

Lonza Verviers Sprl

Parc Industriel de Petit-Rechain BE-4800 Verviers, Belgium

Business Telephone: +32 8732 1611

Lonza Cologne GmbH Nattermannallee 1

DE-50829 Köln, Germany

Business Telephone: + 49 221 99 1990

Lonza Copenhagen ApS

Strandhaven 12

DK-2665 Vallensbaek Strand, Denmark Business Telephone: + 45 4356 7400

E-mail address sds@lonza.com

Responsible/issuing person

1.4 Emergency telephone number

Emergency telephone number : Lonza Ltd, CH-4002 Basel, Switzerland

Telephone: +41 61 313 94 94 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.



2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Remarks : No hazardous ingredients

SECTION 4: First aid measures

4.1 Description of 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.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray

Dry powder Foam

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Heating or fire can release toxic gas.

5.3 Advice for firefighters

Special protective equipment for

firefighters

: In the event of fire, wear self-contained breathing apparatus.

Further information : Use water spray to cool unopened containers.



SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

Methods for 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).

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : No special precautions required.

explosion

Hygiene measures

Advice on protection against fire and : Take precautionary measures against static discharges.

Handle in accordance with good industrial hygiene and safety

practice.

7.2 Conditions for safe storage, including any incompatibilities

containers

Requirements for storage areas and : No special storage conditions required.

7.3 Specific end use(s)

: No information available. Specific use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Countries not listed may have their own country specific values.

Occupational Exposure Limits

Switzerland

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|--------------------|---------|-------------------------------|----------------------|-------|
| Dimethyl sulfoxide | 67-68-5 | STEL | 100 ppm 320 mg/m3 | SMAK |
| | | TWA | 50 ppm 160 mg/m3 | SMAK |



| Germany | | | | | |
|---|----------------|---|--------------------------|-----------|--|
| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis | |
| Dimethyl sulfoxide | 67-68-5 | MAK | 50 ppm 160 mg/m3 | DFG MAK | |
| Peak-limit: excursion factor (category) | | Peak-limit: excursion factor (category) 2 | | | |
| · · · · · · · · · · · · · · · · · · · | | | 50 ppm 160 mg/m3 | TRGS 900 | |
| Peak-limit: excursion (category) | n factor | Peak-limit: excursion | on factor (category) 2 | | |
| Belgium | | | | | |
| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis | |
| Sucrose | 57-50-1 | TWA | 10 mg/m3 | BE/OEL | |
| Denmark | | | | | |
| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis | |
| Dimethyl sulfoxide | 67-68-5 | GV | 50 ppm 160 mg/m3 | GV (DK) | |
| Sucrose | 57-50-1 | GV (Total dust.) | 3 mg/m3 | GV (DK) | |
| France | | | | | |
| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis | |
| Sucrose | 57-50-1 | VME | 10 mg/m3 | FVL | |
| Italy | | | | | |
| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis | |
| Sucrose | 57-50-1 | TWA | 10 mg/m3 | OEL (IT) | |
| Spain | | | | | |
| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis | |
| Sucrose | 57-50-1 | TWA | 10 mg/m3 | VLA | |
| Sweden | | | | | |
| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis | |
| Dimethyl sulfoxide | 67-68-5 | TWA | 50 ppm 150 mg/m3 | SWO | |
| | | STEL | 150 ppm 500 mg/m3 | SWO | |
| United Kingdom | | | | | |
| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis | |
| Sucrose | 57-50-1 | TWA | 10 mg/m3 | EH40 WEL | |
| | | STEL | 20 mg/m3 | EH40 WEL | |
| Derived No Effect L | _evel (DNEL) a | according to Regulati | ion (EC) No. 1907/2006: | | |
| Substance name | End Use | Exposure routes | Potential health effects | Value | |
| Dimethyl sulfoxide | Workers | Inhalation | Long-term systemic | 394 mg/m3 | |

Skin contact

Workers

effects

Long-term systemic

400 mg/kg



| | | | effects | |
|---|-----------|--------------|----------------------------|------------|
| | Consumers | Skin contact | Long-term systemic effects | 200 mg/kg |
| | Consumers | Oral | Long-term systemic effects | 100 mg/kg |
| | Consumers | Inhalation | Long-term systemic effects | 70 mg/m3 |
| | Workers | Inhalation | Long-term systemic effects | 484 mg/m3 |
| | Workers | Inhalation | Long-term local effects | 265 mg/m3 |
| | Workers | Dermal | Long-term systemic effects | 200 mg/kg |
| | Consumers | Inhalation | Long-term systemic effects | 120 mg/m3 |
| | Consumers | Inhalation | Long-term local effects | 47 mg/m3 |
| | Consumers | Dermal | Long-term systemic effects | 100 mg/kg |
| | Consumers | Oral | Long-term systemic effects | 60 mg/kg |
| Calcium chloride dihydrate | Workers | Inhalation | Long-term local effects | 5 mg/m3 |
| | Consumers | Inhalation | Acute local effects | 5 mg/m3 |
| | Consumers | Inhalation | Long-term local effects | 2,5 mg/m3 |
| | Workers | Inhalation | Acute local effects | 10 mg/m3 |
| Potassium dihydrogenorthoph osphate | Workers | Inhalation | Long-term systemic effects | 4,07 mg/m3 |
| | Consumers | Inhalation | Long-term systemic effects | 3,04 mg/m3 |

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

| Substance name | Environmental Compartment | Value |
|--------------------------|---------------------------|-------------|
| Dimethyl sulfoxide | Fresh water | 17 mg/l |
| | Oral | 700 mg/kg |
| | Sewage treatment plant | 11 mg/l |
| | Soil | 3,02 mg/kg |
| | Sediment | 13,4 mg/kg |
| | Marine water | 1,7 mg/l |
| Potassium | Fresh water | 0,05 mg/l |
| dihydrogenorthophosphate | | |
| | Marine water | 0,0005 mg/l |
| | Intermittent use/release | 0,5 mg/l |
| | Sewage treatment plant | 50 mg/l |

8.2 Exposure controls

Engineering measures

Avoid splashes.

Personal protective equipment

Eye protection : Tightly fitting safety goggles

Hand protection

Material : Nitrile rubber Rate of permeability : > 480 min

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.



Respiratory protection : No personal respiratory protective equipment normally

required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Aqueous solution

Colour : light brown

Odour : no data available

Odour Threshold : no data available

pH : 6,8 - 7,2

Freezing point : no data available

Boiling point/boiling range : no data available

Flash point : does not flash

Evaporation rate : no data available

Flammability (solid, gas) : no data available

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 : no data available

Partition coefficient: n-octanol/water : no data available

Auto-ignition temperature : no data available

Decomposition temperature : no data available

Viscosity : no data available

Explosive properties : no data available

Oxidizing properties : no data available

9.2 Other information

no data available



SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : no data available

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Further information

Remarks: No data is available on the product itself.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish : Remarks: no data available

12.2 Persistence and degradability

Biodegradability : Result: no data available

12.3 Bioaccumulative potential

Bioaccumulation : Remarks: no data available

12.4 Mobility in soil

Distribution among environmental

compartments

Remarks: no data available

12.5 Results of PBT and vPvB assessment

Assessment : This substance/mixture contains no components considered to

be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or

higher.

12.6 Other adverse effects

Additional ecological information : no data available



SECTION 13: Disposal considerations

13.1 Waste treatment methods

: Dispose of in accordance with local regulations. Contact waste disposal services. Product

SECTION 14: Transport information

| IATA | | | Not dangerous goods |
|------|------------------------|---|----------------------|
| | | | g g |
| 14.1 | UN number | : | Not applicable |
| 14.2 | Proper shipping name | | Not applicable |
| 14.3 | Transport hazard class | | Not applicable |
| 14.4 | Packing group | : | Not applicable |
| 14.5 | Environmental hazards | • | • • |
| 14.5 | Environmental nazarus | : | no |
| IMDG | | | Not dangerous goods |
| | | | 140t dangerous goods |
| 14.1 | UN number | : | Not applicable |
| 14.2 | Proper shipping name | : | Not applicable |
| 14.3 | Transport hazard class | : | Not applicable |
| 14.4 | Packing group | : | Not applicable |
| 14.5 | Environmental hazards | : | Marine pollutant: no |
| | | | |
| ADR | | • | Not dangerous goods |
| | | | |
| 14.1 | UN number | : | Not applicable |
| 14.2 | Proper shipping name | : | Not applicable |
| 14.3 | Transport hazard class | : | Not applicable |
| 14.4 | Packing group | : | Not applicable |
| 14.5 | Environmental hazards | : | no |
| | | : | |
| RID | | | Not dangerous goods |
| | | | |
| 14.1 | UN number | : | Not applicable |
| 14.2 | Proper shipping name | : | Not applicable |
| 14.3 | Transport hazard class | : | Not applicable |
| 14.4 | Packing group | : | Not applicable |
| 14.5 | Environmental hazards | | no |
| | | • | |
| DOT | | : | Not dangerous goods |
| 444 | IIN marakan | | Not emplicable |
| 14.1 | UN number | ; | Not applicable |
| 14.2 | Proper shipping name | : | Not applicable |
| 14.3 | Transport hazard class | : | Not applicable |
| 14.4 | Packing group | : | Not applicable |
| 14.5 | Environmental hazards | : | no |



TDG : Not dangerous goods

14.1UN number: Not applicable14.2Proper shipping name: Not applicable14.3Transport hazard class: Not applicable14.4Packing group: Not applicable

14.5 Environmental hazards : no

14.6 Special precautions for user : none

14.7 Transport in bulk according to : Not applicable Annex II of Marpol and the IBC Code

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Restrictions on the manufacture, placing on the : Not applicable market and use of certain dangerous substances, preparations

and articles (Annex XVII)

REACH - Candidate List of Substances of Very High Concern : Not applicable

for Authorisation (Article 59).

REACH - List of substances subject to authorisation (Annex : Not applicable

XIV)

Regulation (EC) No 1005/2009 on substances that deplete the : Not applicable

ozone layer

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

National regulatory information

Water contaminating class : WGK 2 obviously hazardous to water

(Germany) Classification according to AwSV, Annex 1 (5.2)

15.2 Chemical safety assessment

not required

SECTION 16: Other information

Further information

Full text of other abbreviations

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; ATE - Acute Toxicity Estimate; AwSV - Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen / Ordinance on facilities for handling substances that are hazardous to water; BPR – Biocidal



Product Regulation; bw - Body weight; CAS - Chemical Abstract Service; CLP - Classification Labelling Packaging Regulation, Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DNEL-Derived No Effect Level; DOT - Department of Transportation; EC - European Community; ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EmS (Emergency Response Procedures for Ships Carrying Dangerous Goods); EN – European Standard; ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; EU OEL - European Occupational Exposure Limit; GHS -Globally Harmonized System of Classification and Labelling of Chemicals; GLP - Good Laboratory Practice; GV - Danish Exposure Limits for Substances and Materials; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; IMDG - International Maritime Dangerous Goods; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); LOFT - Danish Threshold Limit Value; MAK - German Threshold Limit Value; MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NIOSH/Guide - National Institute of Safety and Health Guidebook; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NTP -National Toxicology Program; OECD - Organization for Economic Co-operation and Development; PBT -Persistent, Bioaccumulative and Toxic substance; PEL - Permissible Exposure Limit; PNEC - Predicted no Effect Concentration; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; REL -Recommended Exposure Limit; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; STEL - Short-Term Exposure Limit; TDG - Transportation of Dangerous Goods; TGG -Dutch Threshold Limit Value; TGV - Swedish OEL; TLV Threshold Limit Value; TLV-C - Threshold Limit Value Ceiling; TWA -Time Weighted Average; UDS - Unscheduled DNA Synthesis; UN - United Nations; VLE - Valeurs limites d'exposition professionnelle aux agents chimiques en France; VME - Valeur (Limite) Moyenne d'Exposition; VOC - Volatile Organic Compound[s]; WEEL - Workplace Environmental Exposure Level; % w/w Percent weight by weight; %(V) Percent Volume

Date format : dd.mm.yyyy

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