

Version 1.0	Revision Date 06.12.2018	Print Date 24.03.2021
SECTION 1: Identification of the sub	stance/mixture and of the company/ur	ndertaking
1.1 Product identifier		
Product name	: hPB CD4+ Naïve, 5M cells	
Material number	: 4W-202	
1.2 Relevant identified uses of the subst	ance or mixture and uses advised agains	t
Use of the Substance/Mixture	: For research use only.	
1.3 Details of the supplier of the safety d	ata 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 Responsible/issuing person	sds@lonza.com	
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 ailable.

Symptoms	:	No information ava
----------	---	--------------------

4.3 Indication of any immediate medical attention and special treatment needed т ent

٢r	e	at	m	۱e

: No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: W	ater spray
	Di	ry powder
	Fo	bam

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 :	I	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.
Advice on protection against fire and explosion	:	Take precautionary measures against static discharges.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice.
7.2 Conditions for safe storage, includi	ng	any incompatibilities
Requirements for storage areas and containers	:	No special storage conditions required.

7.3 Specific end use(s)

Specific use(s)

: No information available.

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	on factor (category) 2	
			50 ppm 160 mg/m3	TRGS 900
Peak-limit: excursion factor (category)		Peak-limit: excursion	on factor (category) 2	

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)

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

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Dimethyl sulfoxide	Workers	Inhalation	Long-term systemic effects	394 mg/m3
	Workers	Skin contact	Long-term systemic effects	400 mg/kg
	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

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

Lonza

hPB CD4+ Naïve, 5M cells

	Marine water	1,7 mg/l
2 Exposure controls		
Engineering measures Avoid splashes.		
Personal protective equipment		
Eye protection	: Tightly fitting safety goggles	
Hand protection Material Rate of permeability	: Nitrile rubber : > 480 min	
Skin and body protection	: Choose body protection according to concentration of the dangerous sub- No special protective equipment rec	stance at the work place.
Respiratory protection	: No personal respiratory protective e required.	quipment normally

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	Aqueous solution
Colour	:	no data available
Odour	:	no data available
Odour Threshold	:	no data available
рН	:	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
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

Lonza

hPB CD4+ Naïve, 5M cells

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 : Strong oxidizing agents

10.6 Hazardous decomposition products

No decomposition if stored normally.

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

Lonza

hPB CD4+ Naïve, 5M cells

D '		
RIOSCC	umulation	: Remarks: no data available
2.4 Mobili	ty in soil	
	ution among environmental rtments	: Remarks: no data available
2.5 Result	ts of PBT and vPvB assess	nent
Assess	sment	: This substance/mixture contains no components considered be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% higher.
2.6 Other	adverse effects	
Additic	nal ecological information	: no data available
ECTION	13: Disposal considerati	ons
3.1 Waste	treatment methods	
Produc	ct	 Dispose of in accordance with local regulations. Contact waste disposal services.
		Contact waste disposal services.
SECTION	14: Transport informatio	
SECTION	14: Transport informatio	
	14: Transport informatio	
IATA 14.1 UN	l number	n Not dangerous goods : Not applicable
IATA 14.1 UN 14.2 Pro	I number oper shipping name	n Not dangerous goods : Not applicable : Not applicable
IATA 14.1 UN 14.2 Pro 14.3 Tra	l number oper shipping name ansport hazard class	n Not dangerous goods : Not applicable : Not applicable : Not applicable
IATA 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa	I number oper shipping name ansport hazard class cking group	n Not dangerous goods : Not applicable : Not applicable : Not applicable : Not applicable : Not applicable
IATA 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa	l number oper shipping name ansport hazard class	n Not dangerous goods : Not applicable : Not applicable : Not applicable
IATA 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa 14.5 En	I number oper shipping name ansport hazard class cking group	n Not dangerous goods : Not applicable : Not applicable : Not applicable : Not applicable : Not applicable
IATA 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa 14.5 En IMDG 14.1 UN	I number oper shipping name ansport hazard class cking group vironmental hazards	n Not dangerous goods : Not applicable : Not applicable : Not applicable : Not applicable : no Not dangerous goods : Not applicable
IATA 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa 14.5 En IMDG 14.1 UN 14.2 Pro	I number oper shipping name ansport hazard class cking group vironmental hazards I number oper shipping name	n Not dangerous goods : Not applicable : Not applicable : Not applicable : Not applicable : no Not dangerous goods : Not applicable : Not applicable : Not applicable
IATA 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa 14.5 En IMDG 14.5 UN 14.2 Pro 14.3 Tra	I number oper shipping name ansport hazard class cking group vironmental hazards I number oper shipping name ansport hazard class	n Not dangerous goods : Not applicable : Not applicable : Not applicable : Not applicable : no Not dangerous goods : Not applicable : Not applicable : Not applicable : Not applicable : Not applicable
IATA 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa 14.5 En IMDG 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa	I number oper shipping name ansport hazard class cking group vironmental hazards I number oper shipping name ansport hazard class cking group	n Not dangerous goods : Not applicable : Not applicable : Not applicable : Not applicable : no Not dangerous goods : Not applicable : Not applicable
IATA 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa 14.5 En IMDG 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa	I number oper shipping name ansport hazard class cking group vironmental hazards I number oper shipping name ansport hazard class	n Not dangerous goods : Not applicable : Not applicable : Not applicable : Not applicable : no Not dangerous goods : Not applicable : Not applicable : Not applicable : Not applicable : Not applicable
IATA 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa 14.5 En IMDG 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa 14.5 En	I number oper shipping name ansport hazard class cking group vironmental hazards I number oper shipping name ansport hazard class cking group	n Not dangerous goods : Not applicable : Not applicable : Not applicable : Not applicable : no Not dangerous goods : Not applicable : Not applicable
IATA 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa 14.5 En IMDG 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa 14.5 En ADR 14.1 UN	I number oper shipping name ansport hazard class cking group vironmental hazards I number oper shipping name ansport hazard class cking group vironmental hazards	n Not dangerous goods : Not applicable : Not applicable : Not applicable : Not applicable : no Not dangerous goods : Not applicable : Not applicable
IATA 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa 14.5 En IMDG 14.1 UN 14.2 Pro 14.5 En ADR 14.1 UN 14.2 Pro	I number oper shipping name ansport hazard class cking group vironmental hazards I number oper shipping name ansport hazard class cking group vironmental hazards	n Not dangerous goods : Not applicable : Not applicable : Not applicable : Not applicable : no Not dangerous goods : Not applicable : Not dangerous goods : Not dangerous goods : Not dangerous goods
IATA 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa 14.5 En IMDG 14.1 UN 14.2 Pro 14.3 Tra 14.5 En ADR 14.1 UN 14.2 Pro 14.1 UN 14.2 Pro 14.3 Tra 14.3 Tra	I number oper shipping name ansport hazard class cking group vironmental hazards I number oper shipping name ansport hazard class cking group vironmental hazards	n Not dangerous goods Not applicable Not applicable Not applicable Not applicable Not applicable Not dangerous goods Not dangerous goods Not applicable
IATA 14.1 UN 14.2 Pro 14.3 Tra 14.4 Pa 14.5 En IMDG 14.1 UN 14.2 Pro 14.3 Tra 14.5 En ADR 14.1 UN 14.2 Pro 14.1 UN 14.2 Pro 14.1 UN 14.2 Pro 14.4 Pa	I number oper shipping name ansport hazard class cking group vironmental hazards I number oper shipping name ansport hazard class cking group vironmental hazards	n Not dangerous goods : Not applicable : Not applicable : Not applicable : Not applicable : no Not dangerous goods : Not applicable : Not dangerous goods : Not dangerous goods : Not dangerous goods

RID		:	Not dangerous goods
14.1 14.2 14.3 14.4 14.5	UN number Proper shipping name Transport hazard class Packing group Environmental hazards		Not applicable Not applicable Not applicable Not applicable no
DOT		:	Not dangerous goods
14.1 14.2 14.3 14.4 14.5	UN number Proper shipping name Transport hazard class Packing group Environmental hazards	:	Not applicable Not applicable Not applicable Not applicable no
TDG		:	Not dangerous goods
14.1 14.2 14.3 14.4 14.5	UN number Proper shipping name Transport hazard class Packing group Environmental hazards		Not applicable Not applicable Not applicable Not applicable no
14.6	Special precautions for user	:	none
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	:	Not applicable

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 market and use of certain dangerous substances, preparations and articles (Annex XVII)	:	Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
Regulation (EC) No 850/2004 on persistent organic pollutants	:	Not applicable
Seveso III: Directive 2012/18/EU of the European Parliament an major-accident hazards involving dangerous substances.	nd c	of the Council on the control

Not applicable

National regulatory information

Water contaminating class : WGK 1 slightly hazardous to water

of

(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

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.

99 / EN