OptiprepTM Safety Data Sheet according to Regulation (EU) 2020/878 Date of issue: 15.11.2021 Revision date: -

Version/Replaced version: 1.0/-

	tion of the output		£ 4h a a a mana a marta a sa a sa	
	tion of the subst	ance/mixture and o	of the company/underta	aking
1.1. Product identifier Product form		Mixture		
Product name		Optiprep™		
UFI		-		
1.2. Relevant identified	d uses of the substa	nce or mixture and uses	s advised against	
1.2.1. Relevant identified			s autiou against	
Use of the substance/mixture		Density gradient media		
		Donoky gradiont modia		
1.2.2. Uses advised agai				
Not intended for use as infusi	on solution			
1.3. Details of the supp Supplier / Manufacturer Serumwerk Bernburg AG Hallesche Landstrasse 105 b 06406 Bernburg - Germany T + 49 3471 860 0	plier of the safety da	ta sheet		
1.4. Emergency teleph	one number		-	
Country	Organisation/Com	bany	Address	Emergency telephone number
Germany	Giftinformationszent Zentrum Pharmakologi Universität Göttingen		Robert-Koch Strasse 40 D-37075 Göttingen	+49 551 19240
SECTION 2: Hazards i	dentification			
2.1. Classification of the	he substance or mix	ture		
Classification according to Not classified	Regulation (EC) No.	1272/2008 [CLP]		
Adverse physicochemical, I To our knowledge, this produc practice. 2.2. Label elements Labelling according to Regi	ct does not present ar	ny particular risk, provideo	d it is handled in accordance w	vith good occupational hygiene and safety
No labelling applicable				
2.3. Other hazards				
	t identified as having e	endocrine disrupting prop		of REACH for having endocrine criteria set out in Commission Delegated
SECTION 3: Composit	tion/information	on ingredients		
3.1. Substances				
Not applicable				
3.2. Mixtures				
This mixture does not contain	any substances to be	e mentioned according to	the criteria of section 3.2 of RI	EACH Annex II.
SECTION 4: First aid n	neasures			
4.1. Description of firs	t aid measures			
First-aid measures general	:		bel. Place the affected person	sible show him this sheet. Failing this, show in the recovery position. Never give
First-aid measures after inhal	ation :	Remove victim to fresh	air and keep at rest in a positio	on comfortable for breathing.
First-aid measures after skin o		Wash with plenty of soa	•	
First-aid measures after eye o		easy to do. Continue rir	nsing.	utes. Remove contact lenses, if present an
First-aid measures after inges	stion :	Rinse mouth. Drink pler	nty of water as a precaution. D	o NOT induce vomiting.
4.2. Most important sy Symptoms/injuries		, both acute and delaye Not expected to presen		ticipated conditions of normal use.
15 11 2021		EN (English)		

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	edical attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measur	es
5.1. Extinguishing media	
Suitable extinguishing media	: Adapt extinguishing agents to the environment. Carbon dioxide. Dry extinguishing powder. Water spray. For a significant fire: Alcohol resistant foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the	e substance or mixture
Hazardous decomposition products in case fire	of : Toxic gases may be formed. Carbon dioxide. Carbon monoxide. Nitrogen oxides (NOx). lodine vapour.
5.3. Advice for firefighters	
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release r	neasures
	ve equipment and emergency procedures
General measures	: Provide adequate ventilation.
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection"
6.2. Environmental precautions	
Prevent entry to sewers and public waters.	
6.3. Methods and material for conta	inment and cleaning up
Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Keep in suitable, closed containers for disposal. Dispose of in accordance with relevant local regulations.
6.4. Reference to other sections	
Exposure controls and personal protection,	see section 8. Concerning disposal elimination after cleaning, see section 13.
SECTION 7: Handling and storage	ye
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety procedures. When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, in	cluding any incompatibilities
Storage conditions	: Store in original container. Store in a well-ventilated place. Protect from sunlight.
Prohibitions on mixed storage	: Keep away from food, drink and animal feedingstuffs.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/	bersonal protection
8.1. Control parameters	

No additional information available

8.2. **Exposure controls**

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Not required. If necessary, wear suitable gloves (EN 374). Nitrile rubber, \geq 0.35 mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Not required. If necessary, wear chemical goggles or safety glasses (EN 166).

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Skin and body protection:

Wear suitable protective clothing (EN 13034, EN ISO 13982-1, EN14605, EN1149-5).

Respiratory protection:

Not required for normal conditions of use. Where exposure through inhalation may occur from use, respiratory protection is recommended. Breathing apparatus with filter P1.

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties 9.1. Information on basic physical and chemical properties Physical state : Liquid Colour : Colourless, clear Odour : Odourless : No data available Melting point/freezing point Boiling point or initial boiling point and boiling : No data available range : No data available Flammability Lower and upper explosion limit : No data available Flash point : No data available : No data available Auto-ignition temperature Decomposition temperature : No data available : 5.0 - 8.0 pН Kinematic viscosity : No data available Solubility : Water: Soluble Partition coefficient n-octanol/water (log value) : Not applicable : No data available Vapour pressure Density and/or relative density : 1,32 g/cm³ at 20 °C : No data available Relative vapour density : Not applicable Particle characteristics 9.2. **Other information**

9.2.1.	Information with regard	to physical hazard classes
Explosiv	ve properties	: No explosive properties
Oxidisin	ig properties	: No oxidising properties

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity
10.1. Reactivity
No dangerous reactions known under normal conditions of use.
10.2. Chemical stability
Stable under use and storage conditions as recommended in section 7.
10.3. Possibility of hazardous reactions
None under normal use.
10.4. Conditions to avoid
High temperature. Direct sunlight. Frost.
10.5. Incompatible materials
Strong oxidizing agents. Strong bases. Strong acids.
10.6. Hazardous decomposition products
No hazardous decomposition products known. In case of fire: Toxic gases may be formed. Carbon dioxide. Carbon monoxide. Nitrogen oxides (NOx). Iodine vapour.
SECTION 11: Toxicological information
44.4 Information on borard alagoes as defined in Denulation (EC) No. 4272/2002

11.1.	Information on hazard classes as def	ined in Regulation (EC) No 1272/2008
Acute to	ticity	: Not classified
		Based on available data, the classification criteria are not met

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	: Not classified
	Based on available data, the classification criteria are not met
erious eye damage/irritation	: Not classified
	Based on available data, the classification criteria are not met
espiratory or skin sensitisation	: Not classified
	Based on available data, the classification criteria are not met
erm cell mutagenicity	: Not classified
	Based on available data, the classification criteria are not met
arcinogenicity	: Not classified
	Based on available data, the classification criteria are not met
eproductive toxicity	: Not classified
	Based on available data, the classification criteria are not met
pecific target organ toxicity (single exposure)	: Not classified
	Based on available data, the classification criteria are not met
pecific target organ toxicity (repeated	: Not classified
xposure)	Based on available data, the classification criteria are not met
spiration hazard	: Not classified
	Based on available data, the classification criteria are not met
1.2. Information on other hazards	
otential adverse human health effects and ymptoms	: Based on available data, the classification criteria are not met

SECTION 12: Ecological informat	ion
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assess	sment
This product does not meet the PBT- or vPvI	3 criteria of REACH regulation, annex XIII.
12.6. Endocrine disrupting properties	
No additional information available	
12.7. Other adverse effects	
No additional information available	
SECTION 13: Disposal considerat	tions
13.1. Waste treatment methods	
Regional legislation (waste)	: Dispose in a safe manner in accordance with local/national regulations.
Waste code	: The waste code number according to the Ordinance on the European Waste Catalogue depends on the waste producer and can therefore vary for any given product. The waste code number is therefore to be gleaned separately from each waste producer.
SECTION 14: Transport informati	on
In accordance with ADR / IMDG / IATA	

14.1. UN number or ID number		
UN-No. (ADR)	: Not applicable	
UN-No. (IMDG)	: Not applicable	
UN-No. (IATA)	: Not applicable	
14.2. UN proper shipping name		
Proper Shipping Name (ADR)	: Not applicable	
Proper Shipping Name (IMDG)	: Not applicable	
Proper Shipping Name (IATA)	: Not applicable	

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according to Regulation (EU) 2020/878 Transport hazard class(es) 14.3. ADR Transport hazard class(es) (ADR) : Not applicable IMDG Transport hazard class(es) (IMDG) : Not applicable ΙΑΤΑ Transport hazard class(es) (IATA) : Not applicable 14.4. **Packing group** Packing group (ADR) : Not applicable Packing group (IMDG) : Not applicable Packing group (IATA) : Not applicable 14.5. **Environmental hazards** Dangerous for the environment : No Marine pollutant : No Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Data sources

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Changes compared to the previous version

Abbreviations	and acronyms:
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	The effective concentration of substance that causes 50% of the maximum response (Median Effective Concentration)
IATA	International Air Transport Association
IMDG	"International Maritime Dangerous Goods Code" for the transport of dangerous goods by sea
LC50	Lethal Concentration to 50 % of a test population (Median Lethal Concentration)

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LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
LOAEL	Lowest Observed Adverse Effect Level
NOAEC/L	No Observed Adverse Effect Concentration/Level
NOEC/L	No Observed Effect Concentration/Level
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic substance
PNEC	Predicted No-Effect Concentration
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
SDS	Safety Data Sheet
STP	Sewage Treatment Plant
UFI	Unique Formula Identifier
vPvB	Very Persistent and Very Bioaccumulative

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.