S A F E T Y D A T A S H E E T

according to Regulation (EC) No. 1907/2006
(amended by Regulation (EU) 2020/878)

NEBNext Ultra II FS Reaction Buffer

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

1.1. Product identifier

Product name NEBNext Ultra II FS Reaction Buffer

Product code -

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

Use of the Substance/Mixture Laboratory chemicals. For research use only.

1.3. Details of the supplier of the safety data sheet

Company/Undertaking Identification
SOPHiA GENETICS SA
La Pièce 12
CH-1180 Rolle
Switzerland
+41 21 694 10 60
http://www.sophiagenetics.com

1.4. Emergency telephone number
local: 145 (Tox Info Suisse)
international: +41 44 251 51 51

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Version GHS 2

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 The substance or mixture is not classified.

In accordance with Regulation (EC) No. 1272/2008, the product does not need to be classified nor labelled.

Additional information For the full text of the phrases mentioned in this Section, see Section 16.

2.2. Label elements

Signal Word -

Hazard Statements None.

Precautionary statements None.

Supplemental information None.

Product identifier Not required.

2.3. Other hazards Endocrine disrupting chemical(s): Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenyl ether

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Components	Weight %	CLP Classification	Product identifier
Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenyl ether	< 1%	Acute Tox. 4 H302, Skin Irrit. 2 H315, Eye Irrit. 2 H319, Aquatic Chronic 3 H412	CAS-No.: 9002-93-1 EC-No.: 618-344-0
Potassium chloride	< 0.25%	-	CAS-No.: 7447-40-7 EC-No.: 231-211-8
Magnesium chloride	< 0.25%	-	CAS-No.: 7786-30-3 EC-No.: 232-094-6

For the full text of the phrases mentioned in this Section, see Section 16.

Hazardous impurities None known.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation No special measures required.

Skin contact Wash with water and soap as a precaution.

Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
Ingestion	Clean mouth with water and drink afterwards plenty of water.
4.2. Most important symptoms and effects, both acute and delayed	The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.
4.3. Indication of any immediate medical attention and special treatment needed	None known.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry extinguishing agent or carbon dioxide. No special measures required.
Unsuitable extinguishing media	High volume water jet.
5.2. Special hazards arising from the substance or mixture	The product is not flammable.

5.3. Advice for firefighters

Special protective equipment for firefighters	Standard procedure for chemical fires.
Specific methods	No special measures required.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	No special measures required.
For emergency responders	Forms slippery/greasy layers with water.
6.2. Environmental precautions	No special environmental precautions required.
6.3. Methods and material for containment and cleaning up	Clean up promptly by sweeping or vacuum. After cleaning, flush away traces with water.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	No special technical protective measures required.
7.2. Conditions for safe storage, including any incompatibilities	Store at room temperature in the original container.
7.3. Specific end use(s)	No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit(s)	No data is available on the product itself.

8.2. Exposure controls

Appropriate engineering controls	General industrial hygiene practice.
Personal protection equipment	
Respiratory protection	No special protective equipment required.
Hand protection	Gloves made of Nitril. The selected protective gloves have to satisfy the specifications of Regulation (EU) No. 2016/425 and the standard EN 374 derived from it.
Eye protection	Avoid contact with eyes.
Skin and body protection	No special measures required.
Thermal hazards	No special measures required.
Environmental exposure controls	No special measures required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Colourless.
Odour	Faint.
Melting point/ freezing point:	Not determined.
Boiling point or initial boiling point / range:	Not determined.
Flammability:	non-flammable
Lower and upper explosion limit:	Not determined.
Flash point:	Not determined.
Auto-ignition temperature:	Not determined.
Decomposition temperature:	Not determined.

pH:	7.5
Kinematic viscosity:	Not determined.
Solubility:	Not determined.
Partition coefficient n-octanol/water (log value):	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density:	Not determined.
Relative vapour density:	Not determined.
Particle characteristics:	Not applicable.

9.2. Other information

9.2.1 Information with regard to physical hazard classes	No information available.
9.2.2 Other safety characteristics	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity	No information available.
10.2. Chemical stability	No decomposition if used as directed.
10.3. Possibility of hazardous reactions	No information available.
10.4. Conditions to avoid	Vapours in contact with fire or red-hot surfaces may form decomposition products with highly irritating and warning effects.
10.5. Incompatible materials	Acids and bases. Oxidizing agents.
10.6. Hazardous decomposition products	None under normal use.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	**Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenyl ether (CAS 9002-93-1)** Oral LD50 Rat = 1800 mg/kg (NZ_CCID) **Potassium chloride (CAS 7447-40-7)** Oral LD50 Rat = 2600 mg/kg (NLM_CIP) **Magnesium chloride (CAS 7786-30-3)** Dermal LD50 Rat > 2000 mg/kg (ECHA_API) Oral LD50 Rat = 2800 mg/kg (NLM_CIP)
Skin corrosion/irritation	Negligible.
Serious eye damage/eye irritation	Contact with eyes may cause irritation.
Respiratory or skin sensitisation	None.

Carcinogenicity	Contains no ingredient listed as a carcinogen.
Germ cell mutagenicity	Contains no ingredient listed as a mutagen.
Reproductive toxicity	Contains no ingredient listed as toxic to reproduction.
Specific target organ toxicity - Single exposure	No data available.
Specific target organ toxicity - Repeated exposure	No data available.
Aspiration hazard	No data available.
Human experience	This product has no known adverse effect on human health.

11.2. Information on other hazards

Endocrine disrupting properties	Endocrine disrupting chemical(s): Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenyl ether (CAS 9002-93-1)
Other information	No data available.

SECTION 12: Ecological information

12.1. Toxicity	No data available.

Potassium chloride (CAS 7447-40-7)

Ecotoxicity - Freshwater Algae - Acute Toxicity Data	EC50 72 h Desmodesmus subspicatus 2500 mg/L (IUCLID)
Ecotoxicity - Freshwater Fish - Acute Toxicity Data	LC50 96 h Lepomis macrochirus 1060 mg/L [static] (EPA) LC50 96 h Pimephales promelas 750 - 1020 mg/L [static] (EPA)
Ecotoxicity - Water Flea - Acute Toxicity Data	EC50 48 h Daphnia magna 825 mg/L (IUCLID) EC50 48 h Daphnia magna 83 mg/L [Static] (EPA)

Magnesium chloride (CAS 7786-30-3)

Ecotoxicity - Freshwater Algae - Acute Toxicity Data	EC50 72 h Pseudokirchneriella subcapitata >82.7 mg/L (OECD_SIDS)
Ecotoxicity - Freshwater Fish - Acute Toxicity Data	LC50 96 h Pimephales promelas 1970 - 3880 mg/L [static] (EPA)
Ecotoxicity - Water Flea - Acute Toxicity Data	EC50 48 h Daphnia magna 140 mg/L [Static] (EPA)

12.2. Persistence and degradability	Readily biodegradable.
12.3. Bioaccumulative potential	Does not bioaccumulate.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
12.6. Endocrine disrupting properties	Endocrine disrupting chemical(s): Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenyl ether (CAS 9002-93-1)
12.7. Other adverse effects	No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products	Dispose of in accordance with local regulations. European Waste catalogue code (EWC-code): 07 07 99. (corresponds to the VeVA Code - Ordinance on the Movement of Waste)
Contaminated packaging	Offer rinsed packaging material to local recycling facilities.

SECTION 14: Transport information

14.1. UN number or ID number	Not applicable.
14.2. UN proper shipping name	Not applicable.
14.3. Transport hazard class(es)	Not applicable.
14.4. Packing group	Not applicable.
14.5. Environmental hazards	Not applicable.
14.6. Special precautions for user	Not applicable.
14.7. Maritime transport in bulk according to IMO instruments	Not applicable.

UN Model Regulations

ADR/RID	Not regulated.
IMDG	Not regulated.
IATA	Not regulated.
Further Information	Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

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

Regulatory Information	In accordance with Regulation (EC) No. 1272/2008, the product does not need to be classified nor labelled. Water contaminating class (WGK Germany) = 1. Storage class 12.

Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenyl ether (CAS 9002-93-1)

TEDX (The Endocrine Disruption	Present

Exchange) - Potential Endocrine Disruptors	
Switzerland - Candidate List	Endocrine disrupting properties (covering well defined substances and UVCB substances, polymers and homologues) Endocrine disrupting properties
Switzerland - Chemical Risk Reduction Ordinance - Prohibited and Restricted Substances	Use restricted. See annex 1.7 in the regulation (also preparations including clearly defined substances, like UVCB, polymers and homologue substances)
Switzerland - PIC Regulations - Annex I	"pesticide" As Ethoxylated octyl phenol [9036-19-5]
EU - Endocrine Disrupters (COM (2001)262) - Candidate List of Substances	Group III Chemical
EU - European Pollutant Release and Transfer Register (E-PRTR) (166/2006) - Threshold Quantities	"1 kg/yr TQ (water, listed under Octylphenols and Octylphenol ethoxylates)" As tert-Octylphenol, ethoxylated [9036-19-5]
EU - REACH (1907/2006) - Annex XIV (Authorization List) Recommendations by ECHA	Endocrine disrupting properties, Article 57f - environment (Fifth list of Annex XIV recommendations by ECHA, listed under 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated)
EU - REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	Intrinsic properties: Endocrine disrupting properties (Article 57(f) - environment) Application date: July 4, 2019 Sunset date: January 4, 2021 Exempted uses: extended latest application and sunset date for the research, development and production of medicinal products or medical devices in view of their use for the diagnosis, treatment or prevention of the coronavirus disease (COVID-19) (42)
EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances of Very High Concern (SVHC) for Authorisation	Reason for inclusion Endocrine disrupting properties, Article 57f - environment (618-344-0)
Potassium chloride (CAS 7447-40-7)	
EU - European Pollutant Release and Transfer Register (E-PRTR) (166/2006) - Threshold Quantities	"2000000 kg/yr TQ (water as total Cl) 2000000 kg/yr TQ (land as total Cl)" As Chlorides [RR-12853-0]
EU - REACH (1907/2006) - List of Registered Intermediates	Present ([231-211-8])
EU - REACH (1907/2006) - List of Registered Substances	Present
UNECE - Kiev Protocol on Pollutant Release and Transfer Registers (PRTR) - Annex II - Column 1b - Releases to Water	"2000000 kg/yr (as total Cl)" As Chlorides [RR-12853-0]
UNECE - Kiev Protocol on Pollutant Release and Transfer Registers (PRTR) - Annex II - Column 1c - Releases to Land	"2000000 kg/yr (as total Cl)" As Chlorides [RR-12853-0]
UNECE - Kiev Protocol on Pollutant Release and Transfer Registers (PRTR) - Annex II - Column 2	"2000000 kg/yr (as total Cl)" As Chlorides [RR-12853-0]
UNECE - Kiev Protocol on Pollutant Release and Transfer Registers (PRTR) - Annex II - Column 3	"10000 kg/yr (as total Cl)" As Chlorides [RR-12853-0]
Magnesium chloride (CAS 7786-30-3)	
TEDX (The Endocrine Disruption Exchange) - Potential Endocrine Disruptors	Present
Switzerland - Chemical Risk Reduction Ordinance - Prohibited and Restricted Substances	Use restricted. See annex 2.7 in the regulation (also preparations)
EU - European Pollutant Release	"2000000 kg/yr TQ (water

and Transfer Register (E-PRTR) (166/2006) - Threshold Quantities	as total Cl) 2000000 kg/yr TQ (land as total Cl)" As Chlorides [RR-12853-0]
EU - REACH (1907/2006) - List of Registered Intermediates	Present ([232-094-6])
EU - REACH (1907/2006) - List of Registered Substances	Present
UNECE - Kiev Protocol on Pollutant Release and Transfer Registers (PRTR) - Annex II - Column 1b - Releases to Water	"2000000 kg/yr (as total Cl)" As Chlorides [RR-12853-0]
UNECE - Kiev Protocol on Pollutant Release and Transfer Registers (PRTR) - Annex II - Column 1c - Releases to Land	"2000000 kg/yr (as total Cl)" As Chlorides [RR-12853-0]
UNECE - Kiev Protocol on Pollutant Release and Transfer Registers (PRTR) - Annex II - Column 2	"2000000 kg/yr (as total Cl)" As Chlorides [RR-12853-0]
UNECE - Kiev Protocol on Pollutant Release and Transfer Registers (PRTR) - Annex II - Column 3	"10000 kg/yr (as total Cl)" As Chlorides [RR-12853-0]
15.2. Chemical safety assessment	Not required.

SECTION 16: Other information

Key or legend to abbreviations and acronyms	CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS) EWC: European Waste catalogue code VeVA: Ordinance on the Treatment of Waste (SR 814.610)
Key literature references and sources for data	Sources of key data used to compile the Safety Data Sheet: REACH, ECHA.
Full text of phrases referred to under sections 2 and 3	H302: Harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation. H412: Harmful to aquatic life with long lasting effects.
Training advice	For further information, refer to the product technical data sheet.
Instructions for use	Restricted to professional users.
Disclaimer	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.

Document Approvals

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