

# **Ultra-Long DNA Sequencing Kit**

**SQK-ULK001** 

Date: 07/12/2020

# **SAFETY DATA SHEET**



Oxford Nanopore Technologies Gosling Building, Edmund Halley Road, Oxford Science Park, Oxford OX4 4DQ, UK support@nanoporetech.com



# SAFETY DATA SHEET SQK-ULK001 Ultra-Long DNA Sequencing Kit

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name SQK-ULK001 Ultra-Long DNA Sequencing Kit

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

**Identified uses** Laboratory reagent.

**Uses advised against**No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

**Supplier** Oxford Nanopore Technologies Ltd.

Gosling Building Edmund Halley Road Oxford Science Park

Oxford OX4 4DQ

UK

T: +44 (0) 845 034 7900 F: +44 (0) 845 034 7901 E: support@nanoporetech.com

1.4. Emergency telephone number

**Emergency telephone** +44 (0) 845 034 7900 (Mon - Fri 09:00 - 17:00)

#### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

2.2. Label elements

Important Notes This product is considered to be a small package and is labelled according to the relevant

provisions of the legislation.

Hazard statements NC Not Classified

Supplemental label

EUH210 Safety data sheet available on request.

information

Supplementary precautionary P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

statements

#### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

# SQK-ULK001 Ultra-Long DNA Sequencing Kit

# SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

Glycerol < 50%

CAS number: 56-81-5 EC number: 200-289-5

Substance with National workplace exposure limits.

Classification
Not Classified

The full text for all hazard statements is displayed in Section 16.

**Composition comments** This kit contains the following components:

Rapid Adapter F (ULK001) 40µL Fragmentation mix (ULK001) 50µL FRA Dilution Buffer (ULK001) 1600µL L Fragment Buffer (ULK001) 6500µL Elution Buffer (ULK001) 1500µL Sequencing Buffer (ULK001) 1500µL Flush Buffer (ULK001) 7200µL Priming Tether (ULK001) 600µL

#### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

**General information**None of the components are considered to be a significant hazard due to their small quantity.

Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical

personnel.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for

breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

Ingestion Rinse mouth thoroughly with water. Move affected person to fresh air and keep warm and at

rest in a position comfortable for breathing. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious

person.

Skin contact Remove affected person from source of contamination. Rinse immediately with plenty of

water.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 10 minutes.

**Protection of first aiders** First aid personnel should wear appropriate protective equipment during any rescue.

#### 4.2. Most important symptoms and effects, both acute and delayed

**General information**None of the components are considered to be a significant hazard due to their small quantity.

See Section 11 for additional information on health hazards. The severity of the symptoms

described will vary dependent on the concentration and the length of exposure.

**Inhalation** Prolonged inhalation of high concentrations may damage respiratory system.

**Ingestion** Gastrointestinal symptoms, including upset stomach.

**Skin contact** Prolonged contact may cause dryness of the skin.

**Eye contact** May cause temporary eye irritation.

# SQK-ULK001 Ultra-Long DNA Sequencing Kit

#### 4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

Specific treatments No special treatment required.

#### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry

powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

Specific hazards None of the components are considered to be a significant hazard due to their small quantity.

Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion

products

Thermal decomposition or combustion products may include the following substances:

Harmful gases or vapours.

#### 5.3. Advice for firefighters

Protective actions during

firefighting

Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak.

Special protective equipment

for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

# SECTION 6: Accidental release measures

# 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Keep unnecessary and unprotected personnel away from the spillage. Wear protective

> clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage.

#### 6.2. Environmental precautions

**Environmental precautions** Avoid discharge to the aquatic environment.

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up

For all components:

Wear protective clothing as described in Section 8 of this safety data sheet. Reuse or recycle products wherever possible. Wipe up with an absorbent cloth and dispose of waste safely. The contaminated absorbent may pose the same hazard as the spilled material. Flush contaminated area with plenty of water. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Wash thoroughly

after dealing with a spillage.

#### 6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

# SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

# SQK-ULK001 Ultra-Long DNA Sequencing Kit

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in

Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed

when not in use.

Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Store in accordance with local

regulations. Protect from sunlight. Store at temperatures not exceeding 4°C.

Storage class Unspecified storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

#### SECTION 8: Exposure controls/Personal protection

#### 8.1. Control parameters

#### Occupational exposure limits

Glycerol

Long-term exposure limit (8-hour TWA): WEL 10 mg/m3 mist

WEL = Workplace Exposure Limit.

#### 8.2. Exposure controls

#### Protective equipment





Appropriate engineering controls

Provide adequate ventilation. Good general ventilation should be adequate to control worker exposure to airborne contaminants.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. The following protection should be worn: Chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

# SQK-ULK001 Ultra-Long DNA Sequencing Kit

Hygiene measures Provide eyewash station and safety shower. Contaminated work clothing should not be

allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When

using do not eat, drink or smoke.

Respiratory protection Respiratory protection complying with an approved standard should be worn if a risk

assessment indicates inhalation of contaminants is possible. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure

controls

Not regarded as dangerous for the environment.

#### SECTION 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

Product comments This product is a kit consisting of a series of vials. All of the components have the following

physical properties:

Appearance Liquid.

Colour Colourless.

Odour Odourless.

Odour threshold Not available.

pH Not available.

Melting point ~0°C @ 760 mm Hg

Initial boiling point and range ~100°C @ 760 mm Hg

Flash point Not available.

Evaporation rate Not available.

Upper/lower flammability or

explosive limits

Partition coefficient

Not available.

Not available.

Vapour pressure Not available.

Vapour density Not available.

Relative density Not available.

Solubility(ies) Soluble in water.

Auto-ignition temperature Not available.

**Decomposition Temperature** Not available.

Viscosity Not applicable.

**Explosive properties** Not considered to be explosive.

Oxidising properties Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information No information required.

#### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

# SQK-ULK001 Ultra-Long DNA Sequencing Kit

**Reactivity** See the other subsections of this section for further details.

10.2. Chemical stability

Stable at normal ambient temperatures and when used as recommended. Stable under the

prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous

No potentially hazardous reactions known.

reactions

10.4. Conditions to avoid

Conditions to avoid Avoid heat. Protect from sunlight.

10.5. Incompatible materials

Materials to avoid

No specific material or group of materials is likely to react with the product to produce a

hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition

products

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

#### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Toxicological effects**None of the components of this kit are regarded as a health hazard under current legislation.

Acute toxicity - oral

Notes (oral LD<sub>50</sub>) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

**Respiratory sensitisation** Based on available data the classification criteria are not met.

Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

Germ cell mutagenicity

**Genotoxicity - in vitro**Based on available data the classification criteria are not met.

Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

IARC carcinogenicity None of the ingredients are listed or exempt.

Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

# SQK-ULK001 Ultra-Long DNA Sequencing Kit

Reproductive toxicity -

development

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

**STOT - single exposure**Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

General information No specific health hazards known. The severity of the symptoms described will vary

dependent on the concentration and the length of exposure.

**Inhalation** Prolonged inhalation of high concentrations may damage respiratory system.

**Ingestion** Gastrointestinal symptoms, including upset stomach.

**Skin contact** Prolonged contact may cause dryness of the skin.

**Eye contact** May cause temporary eye irritation.

Route of exposure Ingestion Inhalation Skin and/or eye contact

**Target organs** No specific target organs known.

SECTION 12: Ecological information

**Ecotoxicity**None of the components are considered to be a significant hazard due to their small quantity.

12.1. Toxicity

**Toxicity** Based on available data the classification criteria are not met.

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

12.4. Mobility in soil

**Mobility** The product is water-soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

This product does not contain any substances classified as PBT or vPvB.

assessment

12.6. Other adverse effects

Other adverse effects None known.

**SECTION 13: Disposal considerations** 

13.1. Waste treatment methods

# SQK-ULK001 Ultra-Long DNA Sequencing Kit

General information The generation of waste should be minimised or avoided wherever possible. Reuse or recycle

products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and

any local authority requirements.

Disposal methods Dispose of surplus products and those that cannot be recycled via a licensed waste disposal

contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water

authority.

#### SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods

(IMDG, IATA, ADR/RID).

#### 14.1. UN number

Not applicable.

#### 14.2. UN proper shipping name

Not applicable.

#### 14.3. Transport hazard class(es)

No transport warning sign required.

#### 14.4. Packing group

Not applicable.

#### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

#### 14.6. Special precautions for user

Not applicable.

# 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

#### SECTION 15: Regulatory information

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

National regulations Health and Safety at Work etc. Act 1974 (as amended).

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment

Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

EH40/2005 Workplace exposure limits.

**EU legislation** Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

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 (as

amended).

# SQK-ULK001 Ultra-Long DNA Sequencing Kit

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ADR: European Agreement concerning the International Carriage of Dangerous Goods by

Road.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways.

RID: European Agreement concerning the International Carriage of Dangerous Goods by

Rail.

IATA: International Air Transport Association.

ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods.

CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate.

LC₅o: Lethal Concentration to 50 % of a test population.

LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).

EC<sub>50</sub>: 50% of maximal Effective Concentration.

PBT: Persistent, Bioaccumulative and Toxic substance.

vPvB: Very Persistent and Very Bioaccumulative.

General information

This product is considered to be a small package and is labelled according to the relevant

provisions of the legislation.

Key literature references and

sources for data

Source: European Chemicals Agency, http://echa.europa.eu/

Training advice Read and follow manufacturer's recommendations. Only trained personnel should use this

material.

**Revision comments** This is the first issue.

Revision date 07/12/2020

SDS number 9582

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.