Kylt® (DNA Extraction and) Real-Time PCR Detection Kits

Version: September 2023

Valid for the following products:

Kylt® DNA Extraction and Real-Time PCR Detection Kits

Components	Volume
DNA Extraction-Mix	20 ml or 7 ml each
Reaction-Mix	450 µl each
Positive Control	lyophilized
Negative Control	1 ml each

Kylt® Real-Time PCR Detection Kits

Components	Volume
Reaction-Mix	450 µl each
Positive Control	lyophilized
Negative Control	1 ml each

Material Safety Data Sheet
according to 1907/2006/EG, section 31

1. Substance/mixture and Company Identification

1. **Trade name: DNA Extraction-Mix**
2. **Trade name: Reaction-Mix**
3. **Trade name: Positive Control**
4. **Trade name: Negative Control**

Relevant application of the substance /mixture and inadvisable use:
No further relevant information are available.

Application of the substance/mixture: laboratory chemicals

Manufacturer:
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Informing department:

Kylt: kylt-de@san-group.com

2. Hazards Identification:

1: DNA Extraction-Mix

- **classification of the substance/mixture:**
- **classification according to (EG) No 1272/2008**
  H code: no H code

Labelling elements:
Labelling according to (EG) No 1272/2008
The product is classified and labeled in accordance with the CLP Regulation.

Signal word no signal word
Hazard warnings
H code: no H code
EUH208: May produce an allergic reaction.
EUH210: Safety data sheet available on request.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash thoroughly after handling.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
Other hazards:
Results of PBT and vPvB assessment:
PBT: not applicable
vPvB: not applicable

2. and 4. Reaction-Mix and Negative Control

- **classification of the substance/mixture:**
- **classification according to (EG) No 1272/2008**
  H code: no H code

Labelling elements:
Labelling according to (EG) No 1272/2008
The product is classified and labeled in accordance with the CLP Regulation.

Labelling elements
· **Labelling according to (EG) No 1272/2008** not defined
· **Hazard pictograms** not defined
· **Signal word** not defined
· **Hazard warnings** not defined
· **Other hazards**
· **Results of PBT and vPvB assessment:**
PBT: not applicable
vPvB: not applicable

3. Positive Control

- **classification of the substance/mixture:**
- **classification according to (EG) No 1272/2008**
  H code: no H code

Labelling elements:
Labelling according to (EG) No 1272/2008
The product is classified and labeled in accordance with the CLP Regulation.

Signal word no signal word
Hazard warnings
H code: no H code
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash thoroughly after handling.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persits: Get medical advice/attention.
Other hazards:
Results of PBT and vPvB assessment:
PBT: not applicable
vPvB: not applicable

3. Composition/ Information on Ingredients

Chemical characterisation: mixture
CAS No:
7732-18-5 Water
Identification numbers:
EG No: 231-791-2
Chemical characterisation: mixtures
Description: Mixture of the substances listed below with harmless additions.
Dangerous constituents: not defined, concentration is lower than the level of attention.
The concentrations of the substances in this product are generally considered to be without health hazard. We recommend to handle all chemical agents with care.

4. First Aid Meausures

Description of first aid measures
General Information: No special measures are required.
· **After inhalation:** supply fresh air; consult doctor in case of complaints.
· **After skin contact:** Generally the product does not irritate the skin.
· **After contact with eyes:** Rinse out with plenty of water with the eyelid held wide open.
· **After swallowing:** induce vomiting, consult a medical doctor.
· **Information for medical doctor:**
Most important symptoms and effects, both accute and delayed
No further relevant information available.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5. Fire Fighting Measures

Extinguishing agents
· **Suitable extinguishing agents:**
CO_2, extinguishing powder or water spray jet with softener additives or with alcohol-resistant foam.
Special hazards arising from the substance or mixture
No further relevant information available.
Advice for firefighters
Protective equipment: No special measures required.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency measures
Wear personal protective clothing.
Environmental measures: Dilute with plenty of water.
Methods and materials for cleaning up:
Absorb with liquid binding material (sand, kieselguhr, acid binders, universal binders, sawdust).
Reference to other sections
Information on the safe handling see chapter 7.
Information about personal protective equipment see chapter 8.
Information on disposing see chapter 13

7. Handling and Storage

Handling:
· **Measures to ensure safe handling:** No special measures are required.
Fire and explosion protection: No special measures are required.
· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements for storage facilities and containers:** according to product specification
· **Note on storage:** not require
· **Further information about storage conditions:** storage at -20° to +8°C
· **Storage category:**
· **Classification in accordance with the Industrial Safety Regulations (BetrSichV):**
Specific end-of-use: DNA Extraction and Real-time PCR Detection of veterinary samples and feed and food samples.

8. Exposure Controls/ Personal Protection

Additional information about design of technical facilities:
No further data, see chapter 7.
Control parameters
· **Components with critical values that require monitoring at the workplace:** none
Additional guidance: The lists that were valid during the compilation were used as basis.

Limitation and monitoring of exposure
· **Personal protection:**
· **General protective and hygienic measures:** Wash hands before breaks and after work.
· **Breathing protection:** not require.
· **Hand protection:** protective gloves.
· **Material of gloves:** synthetic gloves.
· **Breakthrough time of the glove material:**
The manufacturer should be asked for detailed data. The recommendations of the manufacturer should be followed.
· **Eye protection:** safety glasses.

9. Physical and chemical properties

1. DNA Extraction-Mix

General data
Appearance: yellowish liquid
Odor: odorless
pH value at 20°C: 8
Status change
Melting point: 0°C
Boiling point: no data available
Flashpoint: not applicable
Explosion hazard: No hazard.
Vapour pressure at 20°C: no data available
Density at 20°C: no data available
Solubility in/ Miscibility with water: fully miscible
Solvent content:
Organic solvent: 0,0 %
Water: 98,62 %
Solid content: 1,38 %

Further data: no further relevant data available

2. Reaction-Mix

General data
Appearance: colourless liquid
Odor: odorless
pH value at 20°C: 8
Status change
Melting point: 0°C
Boiling point: no data available
Flashpoint: not applicable
Explosion hazard: No hazard.
Vapour pressure at 20°C: no data available
Density at 20°C: no data available
Solubility in/ Miscibility with water: fully miscible
Solvent content:
Organic solvent: 0 %
Water: 87,04 %
Solid content: 12,96 %

Further data: no further relevant data available

3. Positive Control:

General data
Appearance: white solid
Odor: odorless
pH value at 20°C: not applicable
Status change
Melting point: 0°C
Boiling point: no data available
Flashpoint: not applicable
Explosion hazard: No hazard.
Vapour pressure at 20°C: no data available
Density at 20°C: no data available
Solubility in/ Miscibility with water: fully miscible
Solvent content:
Organic solvent: 0 %
Water: 0 %
Solid content: 100 %

Further data: no further relevant data available

4: Negative Control

General data
Appearance: colourless liquid
Odor: odorless
pH value at 20°C: not applicable
Status change
Melting point: 0°C
Boiling point: 100°C
Flashpoint: not applicable
Explosion hazard: No hazard.
Vapour pressure at 20°C: no data available
Density at 20°C: no data available
Solubility in/ Miscibility with water: fully miscible
Solvent content:
Organic solvent: no data available
Water: no data available
Solid content: no data available

Further data: no further relevant data available

10. Stability and Reactivity

Reactivity
Chemische Stability
Thermal decomposition/ Conditions to be avoided: None, if handled according to order.
Possibility of hazardous reactions: No dangerous reactions known.
Conditions to avoid: No further relevant data available.
Incompatible materials: No further relevant data available.
Hazardous decomposition products: No hazardous decomposition products known.

11. Toxicological Information

Data of toxicological effects
· **Acute toxicity:**
· **Primary irritant effect:**
· **On the skin:** no irritant effect
· **On the eye:** irritant effect
· **Sensitisation:** The mixture does not irritate the skin. Nevertheless, with particulary sensitive individuals, the possibility of allergic reactions is given.
The concentrations of the substances in this product, which cause acute oral toxicity, serious eye damage/eye irritation or sensitisation of the skin or respiratory tract is lower than the level of attention.

12. Ecological Information

1., 2. and 4.: DNA Extraction-Mix, Reaction-Mix and Negative Control
Toxicity
· **Aquatic Toxicity:** No further relevant data available.
· **Persistence and degradability:** No further relevant data available.
· **Behaviour in environmental compartments:**
· **Potential of bioaccumulation:** No further relevant data available.
· **Mobility in soil:** No further relevant data available.
· **Further ecological information:**
· **General information:** Generally not hazardous to water.
· **Results of PBT and vPvB assessment:**
PBT: not applicable.
vPvB: not applicable
· **Other harmful effects:** No further relevant data available.

3. Positive Control
Toxicity
· **Aquatic Toxicity:**
Components with an acute potential effect on the danger of water:
Natriumazide (<0,1 %), M factor.
Components with a chronic potential effect on the danger of water:
Natriumazide (<0,1 %), category 1, M factor.
· **Persistence and degradability:** No further relevant data available.
· **Behaviour in environmental compartments:**
· **Potential of bioaccumulation:** No further relevant data available.
· **Mobility in soil:** No further relevant data available.
· **Further ecological information:**
· **General information:** Generally not hazardous to water.
· **Results of PBT and vPvB assessment:**
PBT: not applicable.
vPvB: not applicable
· **Other harmful effects:** No further relevant data available.

13. Disposal Considerations

Waste treatment methods
Recommendation: Dispose according to the official laws.
Contaminated packaging:
Recommendation: Dispose according to the official laws.
Recommended cleaning agent: Water, if necessary with cleansing agents.

14. Transport Information

UN No
· **ADR, ADN, IMDG, IATA** not applicable
· **UN proper shipping name**
· **ADR, ADN, IMDG, IATA** not applicable
· **Transport hazard class**
· **ADR, ADN, IMDG, IATA**
· **class** not applicable
ADR, IMDG, IATA not applicable
· **Environmental risks:**
· **Marine pollutant:** None
· **Special precautions for user:** not applicable
· **Transportation in bulk according to Annex II of MARPOL 73/78 and according to IBC code** not applicable
· **Transport/ further information:** No dangerous according to the above specifications.
· **UN "Model Regulation":** -

15. Regulatory Information

Regulations for safety, health and environmental protection/specific legislation for the substance or mixture
· **National Regulations:**
· **Classification in accordance with the Industrial Safety Regulations (BetrSichV):** -
· **Water hazard class:** No hazard.
· **Chemical safety assessment:** A chemical safety assessment has not been carried out.

16. Other Information

The specifications rest on the today‘s stand oft he knowledge, they show in particular no assurance of product features and justify no contractual legal relationship.
Department issuing data specification sheet: QS kit lab
Contact: SAN Group Biotech Germany GmbH

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of
Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)