

# FLYLEAF

# Article: T833 DNA-ladder 100bp equalized

# lyophilised, not pre-dyed

Date of compilation: 27.08.2021

# **1** Composition/information on ingredients

# **Bill of materials**

| Name of substance                 | Identifier             | Num<br>ber<br>of<br>piece<br>s | Classification<br>acc. to GHS | Pictograms | Page    |
|-----------------------------------|------------------------|--------------------------------|-------------------------------|------------|---------|
| DNA-ladder                        |                        | 1                              |                               |            | 3 - 12  |
| Roti®-Load DNA 1x (with glycerol) | Article number<br>0100 | 1                              |                               |            | 13 - 24 |



# Article: T833 DNA-ladder

| 2   | Hazards iden   | tification   |
|-----|----------------|--------------|
| 2.1 | Label elements |              |
|     | Signal word    | Not required |

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Precautionary statements

# **3** Transport information

# 3.1 UN number or ID number

- 3.2 UN proper shipping name
- 3.3 Transport hazard class(es)
- 3.4 Packing group
- 3.5 Environmental hazards
- **3.6** Special precautions for user There is no additional information.
- not subject to transport regulations not assigned none not assigned non-environmentally hazardous acc. to the dangerous goods regulations

# 3.7 Maritime transport in bulk according to IMO instrumentsThe cargo is not intended to be carried in bulk.

# 3.8 <u>Information for each of the UN Model Regulations</u> Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information

not assigned International Maritime Dangerous Goods Code (IMDG) - Additional information Not subject to IMDG. International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

# **DNA-ladder**

article number: Version: **1.0 en**  date of compilation: 27.08.2021

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

# 1.1 Product identifier

Identification of the substance

Article number

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

Relevant identified uses:

Uses advised against:

Laboratory chemical Laboratory and analytical use

**DNA-ladder** 

Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).

# 1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

**Telephone:**+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de **Website:** www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment sheet:

e-mail (competent person):

sicherheit@carlroth.de

# 1.4 Emergency telephone number

# **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

# Classification according to Regulation (EC) No 1272/2008 (CLP)

This substance does not meet the criteria for classification in accordance with Regulation No 1272/ 2008/EC.

# 2.2 Label elements

# Labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

# 2.3 Other hazards

# Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.





# **DNA-ladder**

article number:

# **SECTION 3: Composition/information on ingredients**

3.1 Substances

Name of substance

DNA-ladder

# SECTION 4: First aid measures

4.1 Description of first aid measures



# General notes

No special measures are necessary.

# **Following inhalation**

No special measures are necessary.

#### Following skin contact

No special measures are necessary.

#### Following eye contact

No special measures are necessary.

# **Following ingestion**

No special measures are necessary.

- **4.2 Most important symptoms and effects, both acute and delayed** Symptoms and effects are not known to date.
- **4.3 Indication of any immediate medical attention and special treatment needed** none

# SECTION 5: Firefighting measures

# 5.1 Extinguishing media



# Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water, foam, dry extinguishing powder, ABC-powder

# Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible.

# Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO $_2$ ), May produce toxic fumes of carbon monoxide if burning.

# **DNA-ladder**

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# 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

# **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures



# For non-emergency personnel

No special measures are necessary.

# 6.2 Environmental precautions

Keep away from drains, surface and ground water.

# 6.3 Methods and material for containment and cleaning up

# Advice on how to contain a spill

Covering of drains. Take up mechanically.

# Advice on how to clean up a spill

Take up mechanically.

# Other information relating to spills and releases

Place in appropriate containers for disposal.

# 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

No special measures are necessary.

# Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place. Keep in a cool place.

# Incompatible substances or mixtures

Observe hints for combined storage.

# Consideration of other advice:

# Specific designs for storage rooms or vessels

Recommended storage temperature: -20 °C

# 7.3 Specific end use(s)

No information available.





# **DNA-ladder**

article number:

# **SECTION 8: Exposure controls/personal protection**

- 8.1 Control parameters
- 8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

**Skin protection** 



# hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

# • type of material

NBR (Nitrile rubber)

# • material thickness

>0,11 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

# other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

# **Respiratory protection**



Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, colour code: White).

# **Environmental exposure controls**

Keep away from drains, surface and ground water.



# **DNA-ladder**

article number:

| Information on basic physical and chemical properties    |  |  |
|--|--|--|
| Physical state   | solid  |  |
| Form   | -  |  |
| Colour   | white  |  |
| Odour  | odourless  |  |
| Melting point/freezing point                             | not determined   |  |
| Boiling point or initial boiling point and boiling range | not determined   |  |
| Flammability   | this material is combustible, but will not ignite readily      |  |
| Lower and upper explosion limit                          | not determined   |  |
| Flash point  | not applicable   |  |
| Auto-ignition temperature                                | not determined   |  |
| Decomposition temperature                                | not relevant   |  |
| pH (value)   | not applicable   |  |
| Kinematic viscosity                                      | not relevant   |  |
| Solubility(ies)  |  |  |
| Water solubility   | not determined   |  |
| Partition coefficient                                    |  |  |
| Partition coefficient n-octanol/water (log value):       | this information is not available                              |  |
| Vapour pressure  | not determined   |  |
| Density  | 1 <sup>g</sup> / <sub>cm³</sub> at 20 °C                       |  |
| Relative vapour density                                  | information on this property is not available                  |  |
| Particle characteristics                                 | No data available.   |  |
| Other safety parameters                                  |  |  |
| Oxidising properties                                     | none   |  |
| Other information  |  |  |
| Information with regard to physical hazard classes:      | hazard classes acc. to GHS<br>(physical hazards): not relevant |  |
| Other safety characteristics:                            | There is no additional information.                            |  |



# **DNA-ladder**

article number:

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

# 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

# **10.3** Possibility of hazardous reactions

Violent reaction with: strong oxidiser

#### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

#### **10.5** Incompatible materials

There is no additional information.

# 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

# **SECTION 11: Toxicological information**

# 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

# Classification according to GHS (1272/2008/EC, CLP)

This substance does not meet the criteria for classification in accordance with Regulation No 1272/ 2008/EC.

# Acute toxicity

Shall not be classified as acutely toxic.

# Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

# Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

#### **Respiratory or skin sensitisation**

Shall not be classified as a respiratory or skin sensitiser.

# Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Shall not be classified as carcinogenic.

#### **Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

# Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

#### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).



# **DNA-ladder**

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# **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

# Symptoms related to the physical, chemical and toxicological characteristics

# • If swallowed

Data are not available.

# • If in eyes

Data are not available.

# • If inhaled

Data are not available.

# • If on skin

Data are not available.

# • Other information

Health effects are not known.

# **11.2 Endocrine disrupting properties** Not listed.

# 11.3 Information on other hazards

There is no additional information.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

# **Biodegradation**

Data are not available.

- **12.2 Process of degradability** Data are not available.
- **12.3 Bioaccumulative potential** Data are not available.
- 12.4 Mobility in soil

Data are not available.

- **12.5 Results of PBT and vPvB assessment** Data are not available.
- **12.6 Endocrine disrupting properties** Not listed.
- **12.7 Other adverse effects** Data are not available.



# **DNA-ladder**

article number:

# **SECTION 13: Disposal considerations**

# 13.1 Waste treatment methods



Consult the appropriate local waste disposal expert about waste disposal.

# Sewage disposal-relevant information

Do not empty into drains.

# 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Waste catalogue ordinance (Germany).

#### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

# **SECTION 14: Transport information**

| 14.1 UN number o | r ID number |
|------------------|-------------|
|------------------|-------------|

- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards
- 14.6 Special precautions for user

There is no additional information.

# 14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

# 14.8 Information for each of the UN Model Regulations

# Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information

Not subject to ADR, RID and ADN.

# **International Maritime Dangerous Goods Code (IMDG) - Additional information** Not subject to IMDG.

**International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information** Not subject to ICAO-IATA.

not subject to transport regulations

not assigned

none

not assigned

non-environmentally hazardous acc. to the dangerous goods regulations



# **DNA-ladder**

article number:

# **SECTION 15: Regulatory information**

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

**Relevant provisions of the European Union (EU)** 

# Restrictions according to REACH, Annex XVII

not listed

**List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list** Not listed.

#### **Seveso Directive**

| 2012/18/EU (Seveso III) |                                       |   |       |  |
|-------------------------|---------------------------------------|---|-------|--|
| Νο                      | Dangerous substance/hazard categories | Qualifying quantity (tonnes) for the ap-<br>plication of lower and upper-tier re-<br>quirements | Notes |  |
|                         | not assigned                          |   |       |  |

#### **Deco-Paint Directive**

| VOC content | 0%    |
|-------------|-------|
|             | , 0 / |

#### Industrial Emissions Directive (IED)

| VOC content | 0 %               |
|-------------|-------------------|
| VOC content | 0 g/ <sup>1</sup> |

# Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

# Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

# Water Framework Directive (WFD)

not listed

# Regulation on the marketing and use of explosives precursors

not listed

# **Regulation on drug precursors**

not listed

# Regulation on substances that deplete the ozone layer (ODS)

not listed

# Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

# **Regulation on persistent organic pollutants (POP)**

not listed



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# Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

# **SECTION 16: Other information**

#### Abbreviations and acronyms

| Abbr.    | Descriptions of used abbreviations  |  |
|----------|---|--|
| ADN      | Accord européen relatif au transport international des marchandises dangereuses par voies de naviga<br>tion intérieures (European Agreement concerning the International Carriage of Dangerous Goods by In<br>land Waterways) |  |
| ADR      | Accord relatif au transport international des marchandises dangereuses par route (Agreement concern<br>ing the International Carriage of Dangerous Goods by Road)   |  |
| CLP      | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures  |  |
| DGR      | Dangerous Goods Regulations (see IATA/DGR)  |  |
| GHS      | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na<br>tions   |  |
| IATA     | International Air Transport Association   |  |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA)  |  |
| ICAO     | International Civil Aviation Organization   |  |
| IMDG     | International Maritime Dangerous Goods Code   |  |
| PBT      | Persistent, Bioaccumulative and Toxic   |  |
| REACH    | Registration, Evaluation, Authorisation and Restriction of Chemicals  |  |
| RID      | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula-<br>tions concerning the International carriage of Dangerous goods by Rail)  |  |
| SVHC     | Substance of Very High Concern  |  |
| VOC      | Volatile Organic Compounds  |  |
| vPvB     | Very Persistent and very Bioaccumulative  |  |

# Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.



# Roti®-Load DNA 1x (with glycerol) ready-to-use, DNase free

article number: **0100** Version: **2.0 en** Replaces version of: 11.08.2016 Version: (1) date of compilation: 11.08.2016 Revision: 27.08.2021

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

# 1.1 Product identifier

Article number

Identification of the substance

**Roti**®-Load DNA 1x (with glycerol) ready-to-use, DNase free

0100

Registration number (REACH)

not relevant (mixture)

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

Relevant identified uses:

Uses advised against:

Laboratory chemical Laboratory and analytical use

Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).

# 1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

**Telephone:**+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de **Website:** www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment sheet:

# e-mail (competent person):

# sicherheit@carlroth.de

# 1.4 Emergency telephone number

# **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

# Classification according to Regulation (EC) No 1272/2008 (CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/ EC.

# 2.2 Label elements

# Labelling according to Regulation (EC) No 1272/2008 (CLP)

not required



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# 2.3 Other hazards

# Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

# **SECTION 3: Composition/information on ingredients**

3.1 Substances

not relevant (mixture)

3.2 Mixtures

# Description of the mixture

This product does not meet the criteria for classification in any hazard class according to GHS

# **SECTION 4: First aid measures**

# 4.1 Description of first aid measures



**General notes** Take off contaminated clothing.

# Following inhalation

No special measures are necessary.

# Following skin contact

No special measures are necessary.

# Following eye contact

No special measures are necessary.

# Following ingestion

No special measures are necessary.

- **4.2** Most important symptoms and effects, both acute and delayed Symptoms and effects are not known to date.
- **4.3 Indication of any immediate medical attention and special treatment needed** none

# **SECTION 5: Firefighting measures**

5.1 Extinguishing media



# Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)



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#### Unsuitable extinguishing media

water jet

# 5.2 Special hazards arising from the substance or mixture

None.

# Hazardous combustion products

In case of fire may be liberated: Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

# 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

# **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures



# For non-emergency personnel

No special measures are necessary.

# 6.2 Environmental precautions

Keep away from drains, surface and ground water.

# 6.3 Methods and material for containment and cleaning up

# Advice on how to contain a spill

Covering of drains.

# Other information relating to spills and releases

Place in appropriate containers for disposal.

# 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

No special measures are necessary.

# Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs.

# 7.2 Conditions for safe storage, including any incompatibilities

Keep in a cool place.

# Incompatible substances or mixtures

Observe hints for combined storage.

# Consideration of other advice:

# Specific designs for storage rooms or vessels

Recommended storage temperature: -20 °C



# Roti®-Load DNA 1x (with glycerol) ready-to-use, DNase free

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# 7.3 Specific end use(s)

No information available.

# **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

# **National limit values**

**Occupational exposure limit values (Workplace Exposure Limits)** Data are not available.

# 8.2 Exposure controls

# Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

# Skin protection



# hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

# • type of material

NBR (Nitrile rubber)

# material thickness

>0,11 mm

# • breakthrough times of the glove material

>480 minutes (permeation: level 6)

# other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

# **Respiratory protection**



Respiratory protection necessary at: Aerosol or mist formation.

# **Environmental exposure controls**

Keep away from drains, surface and ground water.



# Roti®-Load DNA 1x (with glycerol) ready-to-use, DNase free

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| SEC | TION 9: Physical and chemical proper                     | ties   |  |
|-----|--|--|--|
| 9.1 | Information on basic physical and chemical properties    |  |  |
|     | Physical state   | liquid   |  |
|     | Colour   | blue   |  |
|     | Odour  | odourless  |  |
|     | Melting point/freezing point                             | not determined   |  |
|     | Boiling point or initial boiling point and boiling range | 100 °C   |  |
|     | Flammability   | non-combustible  |  |
|     | Lower and upper explosion limit                          | not determined   |  |
|     | Flash point  | not determined   |  |
|     | Auto-ignition temperature                                | not determined   |  |
|     | Decomposition temperature                                | not relevant   |  |
|     | pH (value)   | not determined   |  |
|     | Kinematic viscosity                                      | not determined   |  |
|     | Solubility(ies)  |  |  |
|     | Water solubility   | miscible in any proportion                                     |  |
|     | Partition coefficient                                    |  |  |
|     | Partition coefficient n-octanol/water (log value):       | this information is not available                              |  |
|     | Vapour pressure  | not determined   |  |
|     | Density  | 1 <sup>g</sup> / <sub>cm³</sub> at 20 °C                       |  |
|     | Relative vapour density                                  | information on this property is not available                  |  |
|     | Particle characteristics                                 | not relevant (liquid)  |  |
|     | Other safety parameters                                  |  |  |
|     | Oxidising properties                                     | none   |  |
| 9.2 | Other information  |  |  |
|     | Information with regard to physical hazard classes:      | hazard classes acc. to GHS<br>(physical hazards): not relevant |  |
|     | Other safety characteristics:                            |  |  |
|     | Miscibility  | completely miscible with water                                 |  |



# Roti®-Load DNA 1x (with glycerol) ready-to-use, DNase free

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# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

This material is not reactive under normal ambient conditions.

# 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

# 10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

There is no additional information.

**10.6** Hazardous decomposition products

Hazardous combustion products: see section 5.

# **SECTION 11: Toxicological information**

# 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Test data are not available for the complete mixture.

# **Classification procedure**

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

# Classification according to GHS (1272/2008/EC, CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/ EC.

# Acute toxicity

Shall not be classified as acutely toxic.

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

# Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

#### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

# Carcinogenicity

Shall not be classified as carcinogenic.

#### **Reproductive toxicity**

Shall not be classified as a reproductive toxicant.



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# Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

#### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

#### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

# Symptoms related to the physical, chemical and toxicological characteristics

#### • If swallowed

Data are not available.

• If in eyes

Data are not available.

• If inhaled

Data are not available.

• If on skin

Data are not available.

• Other information

Health effects are not known.

- **11.2 Endocrine disrupting properties** None of the ingredients are listed.
- **11.3 Information on other hazards** There is no additional information.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

# **Biodegradation**

Data are not available.

12.2 Process of degradability

Data are not available.

**12.3 Bioaccumulative potential** Data are not available.

# **12.4 Mobility in soil** Data are not available.

- **12.5 Results of PBT and vPvB assessment** Data are not available.
- **12.6 Endocrine disrupting properties** None of the ingredients are listed.



# Roti®-Load DNA 1x (with glycerol) ready-to-use, DNase free

article number: 0100

# 12.7 Other adverse effects

Data are not available.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods



Consult the appropriate local waste disposal expert about waste disposal.

# Sewage disposal-relevant information

Do not empty into drains.

#### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Waste catalogue ordinance (Germany).

#### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

gerous goods regulations

# **SECTION 14: Transport information**

| 14.1 | UN number or ID number     | not subject to transport regulations           |
|------|----------------------------|--|
| 14.2 | UN proper shipping name    | not assigned                                   |
| 14.3 | Transport hazard class(es) | none   |
| 14.4 | Packing group              | not assigned                                   |
| 14.5 | Environmental hazards      | non-environmentally hazardous acc. to the dan- |

# 14.6 Special precautions for user

There is no additional information.

# 14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

# 14.8 Information for each of the UN Model Regulations

# Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information

Not subject to ADR, RID and ADN.

**International Maritime Dangerous Goods Code (IMDG) - Additional information** Not subject to IMDG.

# **International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information** Not subject to ICAO-IATA.



# Roti®-Load DNA 1x (with glycerol) ready-to-use, DNase free

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# **SECTION 15: Regulatory information**

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

# **Relevant provisions of the European Union (EU)**

#### **Restrictions according to REACH, Annex XVII**

none of the ingredients are listed

# List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

None of the ingredients are listed. (Or Concentration of the substance in a mixture: <0.1 % Mass concentration)

#### Seveso Directive

| 2012/18/EU (Seveso III) |                                       |   |       |  |
|-------------------------|---------------------------------------|---|-------|--|
| No                      | Dangerous substance/hazard categories | Qualifying quantity (tonnes) for the ap-<br>plication of lower and upper-tier re-<br>quirements | Notes |  |
|                         | not assigned                          |   |       |  |

#### **Deco-Paint Directive**

| VOC content | 0 %<br>, 0 <sup>g</sup> / <sub>1</sub> |
|-------------|--|
|             |  |

# **Industrial Emissions Directive (IED)**

| VOC content                                 | 0 %                           |
|---|-------------------------------|
| VOC content<br>Water content was discounted | 0 <sup>g</sup> / <sub>l</sub> |

# Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

# Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

#### Regulation on the marketing and use of explosives precursors

none of the ingredients are listed

#### **Regulation on drug precursors**

none of the ingredients are listed

# Regulation on substances that deplete the ozone layer (ODS)

none of the ingredients are listed

# Regulation concerning the export and import of hazardous chemicals (PIC)

none of the ingredients are listed

# **Regulation on persistent organic pollutants (POP)**

none of the ingredients are listed



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# **Other information**

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### **National inventories**

| Country | Inventory  | Status                         |
|---------|------------|--------------------------------|
| AU      | AICS       | all ingredients are listed     |
| CA      | DSL        | all ingredients are listed     |
| CN      | IECSC      | all ingredients are listed     |
| EU      | ECSI       | all ingredients are listed     |
| EU      | REACH Reg. | not all ingredients are listed |
| JP      | CSCL-ENCS  | not all ingredients are listed |
| JP      | ISHA-ENCS  | not all ingredients are listed |
| KR      | KECI       | all ingredients are listed     |
| MX      | INSQ       | not all ingredients are listed |
| NZ      | NZIoC      | all ingredients are listed     |
| PH      | PICCS      | not all ingredients are listed |
| TR      | CICR       | not all ingredients are listed |
| TW      | TCSI       | all ingredients are listed     |
| US      | TSCA       | all ingredients are listed     |

#### Legend

| Legena     |   |
|------------|---|
| AICS       | Australian Inventory of Chemical Substances                             |
| CICR       | Chemical Inventory and Control Regulation                               |
| CSCL-ENCS  | List of Existing and New Chemical Substances (CSCL-ENCS)                |
| DSL        | Domestic Substances List (DSL)  |
| ECSI       | EC Substance Inventory (EÌNEĆS, ELINCS, NLP)                            |
| IECSC      | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ       | National Inventory of Chemical Substances                               |
| ISHA-ENCS  | Inventory of Existing and New Chemical Substances (ISHA-ENCS)           |
| KECI       | Korea Existing Chemicals Inventory                                      |
| NZIoC      | New Zealand Inventory of Chemicals                                      |
| PICCS      | Philippine Inventory of Chemicals and Chemical Substances (PICCS)       |
| REACH Reg. | REACH registered substances   |
| TCSI       | Taiwan Chemical Substance Inventory                                     |
| TSCA       | Toxic Substance Control Act   |
|            |   |

#### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

# **SECTION 16: Other information**

# Indication of changes (revised safety data sheet)

Alignment to regulation: Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

Restructuring: section 9, section 14



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| Section | Former entry (text/value)                             | Actual entry (text/value)   | Safety-<br>relev-<br>ant |
|---------|---|---|--------------------------|
| 2.2     | Signal word:<br>not required                          |   | yes                      |
| 2.3     | Other hazards:<br>There is no additional information. | Other hazards   | yes                      |
| 2.3     |   | Results of PBT and vPvB assessment:<br>This mixture does not contain any substances<br>that are assessed to be a PBT or a vPvB. | yes                      |

# Abbreviations and acronyms

| Abbr.    | Descriptions of used abbreviations  |  |
|----------|---|--|
| ADN      | Accord européen relatif au transport international des marchandises dangereuses par voies de naviga<br>tion intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Ir<br>land Waterways) |  |
| ADR      | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerr<br>ing the International Carriage of Dangerous Goods by Road)   |  |
| CLP      | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures  |  |
| DGR      | Dangerous Goods Regulations (see IATA/DGR)  |  |
| EINECS   | European Inventory of Existing Commercial Chemical Substances   |  |
| ELINCS   | European List of Notified Chemical Substances   |  |
| GHS      | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na<br>tions   |  |
| IATA     | International Air Transport Association   |  |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA)  |  |
| ICAO     | International Civil Aviation Organization   |  |
| IMDG     | International Maritime Dangerous Goods Code   |  |
| NLP      | No-Longer Polymer   |  |
| PBT      | Persistent, Bioaccumulative and Toxic   |  |
| REACH    | Registration, Evaluation, Authorisation and Restriction of Chemicals  |  |
| RID      | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula-<br>tions concerning the International carriage of Dangerous goods by Rail)  |  |
| SVHC     | Substance of Very High Concern  |  |
| VOC      | Volatile Organic Compounds  |  |
| vPvB     | Very Persistent and very Bioaccumulative  |  |

# Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).



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#### **Classification procedure**

Physical and chemical properties. The classification is based on tested mixture. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.