

Safety Data Sheet

In accordance with Regulation (EU) 2020/878

Revision date: 30.06.2023 version 5

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

| | |
|--|---|
| Product name | RiboGrip® RNase Inhibitor |
| Catalog number | 06-22-01000, 06-22-00400, 06-22-02000, 06-22-04000, 06-22-20000, 06-22-100k, 06-22-400k |
| REACH registration number | Not applicable |
| ECHA registration number (EC-No) | Not applicable |
| Unique formula identifier (UFI) code | Not applicable |
| Recommended use of the chemical and uses advised against | This product is for Research Use Only. Not for consumer use. |
| Manufacturer/Supplier | Solis BioDyne OÜ Teaduspargi 9, 50411 Tartu, Estonia info@solisbiodyne.com Tel. +372 740 9960, Fax. +372 740 2079 |
| Information in case of emergency | Solis BioDyne Tel. +372 740 9960 EU Emergency Service Tel 112 Estonian Poison Center +372 794 3794 |

2. HAZARDS IDENTIFICATION

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| Classification of the substance or mixture | Classification according to Regulation (EC) No 1272/2008 |
| Physical hazards | Not hazardous |
| Health hazards | Not hazardous |
| Environmental hazards | Not hazardous |
| Explosion hazards | Not hazardous |
| Additional hazards | This mixture does not contain any substances that are assessed to be a PBT or a vPvB The mixture does not contain any nanoforms |
| Label elements | Labelling according to Regulation (EC) No 1272/2008 [CLP] |
| Pictograms | None |
| Signal word | None |
| Hazard statements | Not applicable |
| EU Specific Hazard Statements | Not applicable |
| Precautionary Statements | |
| Prevention | Not applicable |
| Response | Not applicable |
| Storage | Routine storage at -28°C to -18°C until the end of shelf-life (Expiry Date marking on the package). Keep/store only in original/labeled container. Transport conditions in section 14 |
| Disposal | Prevent product from entering drains. Do not allow material to contaminate ground water system |
| Other Hazards | No endocrine disruptors information is available |

3. COMPOSITION/ INFORMATION ON INGREDIENTS

- 3.1 Substances
Hazardous/Non-hazardous Components:
- 3.2 Mixtures

| Hazardous/Non-hazardous Components: | | | | | | | |
|-------------------------------------|-----------|-----------|---------------------|--------------|--|------------------------------------|---------------------------|
| Component | CAS-No. | EC-No. | REACH reg No | Conc % (w/w) | Classification according to Regulation (EC) No 1272/2008 (CLP) | | |
| | | | | | Pictogram, signal word code (s) | Hazard class and category code (s) | Hazard statement code (s) |
| H ₂ O | 7732-18-5 | 231-791-2 | - | <49 | - | - | - |
| Glycerol | 56-81-5 | 200-289-5 | 01211947198718-XXXX | <51 | - | - | - |
| KCl | 7447-40-7 | 231-211-8 | - | <1 | - | - | - |
| Tris-HCl | 77-86-1 | 201-064-4 | - | <1 | - | - | - |
| RiboGrip® RNase Inhibitor | N/A | N/A | - | <0.1 | - | - | - |

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

There are no additional ingredients (incl nanoforms) present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment.

4. FIRST-AID MEASURES

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| Skin contact | Wash off with plenty of water. Immediate medical attention is not required. |
| Eye contact | Rinse opened eye immediately with plenty of water. Remove contact lenses if present. If irritation persists, get medical attention. |
| Inhalation | Move to fresh air. Consult a physician if necessary. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Consult a physician if necessary. |
| Most important symptoms and effects, both acute and delayed | No information available |
| Indication of any immediate medical attention and special treatment needed | None |
| Notes to physician | Treat symptomatically |

5. FIRE-FIGHTING MEASURES

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| Suitable extinguishing media | Dry chemical, CO ₂ , water spary or alcohol resistant foam. |
| Unsuitable extinguishing media | No information available |
| Fire/Explosion hazards | Not applicable |
| Protective equipment and precautions for fire-fighters | Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes |

6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions | Use personal protective equipment. Ensure adequate ventilation, especially in confined areas. |
| Personal protective equipment | Use personal protection recommended in Section 8. |
| Environmental precautions | Do not allow to enter surface/ sewers or ground water. Prevent further leakage or spillage if safe to do so. See section 12 for additional information. |
| Methods and material for containment and cleaning up | Soak up with inert absorbent material |

7. HANDLING AND STORAGE

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| Precautions for safe handling | Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment |
| Conditions for safe storage, including any incompatibilities | Store at -20°C. Keep/store only in original container. Transport conditions in section 14 |
| Specific uses | For Research Use Only |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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| Exposure Limits | | |
| Chemical Name | Country | Limits |
| Glycerol 56-81-5 | Belgium (TWA) | 10 mg/m³ |
| | Czech Republic | 10 mg/m³ TWA 15 mg/m³ Ceiling |
| | France OEL (TLV) | 10 mg/m³ |
| | Germany OEL (TWA) | 200 mg/m³ exposure factor 2 |
| | Poland | 10 mg/m³ TWA |
| | Portugal | 10 mg/m³ TWA |
| | Spain OEL (TWA) | 10 mg/m³ |
| | Switzerland | 100 mg/m³ STEL 50 mg/m³ TWA |
| | United Kingdom | 10 mg/m³ TWA (mist) |
| | USA | 15 mg/m³ (total dust) 5 mg/m³ (respirable) |
| Engineering measures | Showers. Eyewash stations. Ensure adequate ventilation. | |
| Personal protective equipment: | | |
| Respiratory protection | Not required. Use in well ventilated areas. | |
| Skin and body protection | Wear suitable protective clothing and gloves | |
| Eye and face protection | Wear safety glasses with side shields (or goggles) | |
| Protection of hands | Check protective gloves prior to each use for their proper condition. Material of gloves: Nitrile rubber, NBP | |
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice | |
| Environmental exposure controls | Prevent product from entering drains. Do not allow material to contaminate ground water system | |

9. PHYSICAL AND CHEMICAL PROPERTIES

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|---------------------------------------|--|
| Physical state | Slightly viscous liquid |
| Colour | Colorless |
| Odour | Not defined |
| pH value | 7.0-9.0. Contact info@solisbiodyne.com for specific information |
| Melting/freezing point | No data available |
| Boiling point/ boiling range | No data available |
| Flammability | No data available |
| Lower and upper explosion limit | No data available |
| Flash point | No data available |
| Autoignition temperature | No data available |
| Decomposition temperature | No data available |
| Kinematic viscosity | No data available |
| Solubility | No data available |
| Partition coefficient n-octanol/water | No data available |
| Vapor pressure | No data available |
| Density and/or relative density | No data available |
| Relative vapor density | No data available |

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| Decomposition temperature | No data available |
| Particle characteristics | No data available |
| Information with regard to physical hazard classes | Not hazardous |
| Other safety characteristics | No information available |

10. STABILITY AND REACTIVITY

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|------------------------------------|---|
| Reactivity | No data available |
| Chemical stability | Stable under normal conditions |
| Possibility of hazardous reactions | Hazardous reaction has not been reported |
| Conditions to avoid | No information available |
| Incompatible materials | Strong oxidizing agents, acids and alkali |
| Hazardous decomposition products | No data available |

11. TOXICOLOGICAL INFORMATION

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|---------------------------------|--|--------------------|------------------------|
| Acute toxicity | There is no evidence available indicating acute toxicity | | |
| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
| Glycerol 56-81-5 | = 12600 mg/kg Oral | > 10 g/kg(Rabbit) | >2.75mg/L(Rat) |
| Skin corrosion/irritation | May cause skin irritation | | |
| Serious eye damage/irritation | May cause eye irritation | | |
| Sensitization: | | | |
| Respiratory | Material may be irritating to mucous membranes and upper respiratory tract | | |
| Skin | Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals | | |
| Germ cell mutagenicity | No data available | | |
| Carcinogenicity | No data available | | |
| Reproductive toxicity | No data available | | |
| STOT-single exposure | No data available | | |
| STOT-repeated exposure | No data available | | |
| Aspiration hazard | No data available | | |
| Endocrine disrupting properties | No data available | | |
| Information on other hazards | No data available | | |

12. ECOLOGICAL INFORMATION

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|---------------------------------|--|
| Marine pollutant | No data available |
| Ecotoxicity | No data available. Prevent product from entering drains. Do not allow material to contaminate ground water system. |
| Mobility | No data available |
| Persistence and degradability | No data available |
| Bioaccumulation | No data available |
| Endocrine disrupting properties | No data available |
| Other adverse effects | No data available |

13. DISPOSAL CONSIDERATIONS

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| Waste handling and disposal | The generation of waste should be avoided or minimized wherever possible. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations. |
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| Information regarding the disposal of the packaging | Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique |
| Physical/chemical properties that may affect waste treatment options shall be specified | No special |
| Sewage disposal | Do not empty into drains. Do not dispose of waste into sewer |
| Special precautions for any recommended waste treatment | Consider local regulations and safe disposal procedures |

14. TRANSPORT INFORMATION

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| UN number: | |
| UN proper shipping name | Not applicable |
| Transport hazard class (es): | |
| Packing group | Not applicable |
| Environmental hazards | Not hazardous goods |
| Special precautions for user | Handle in accordance with good industrial hygiene and safety practice |
| Land transport ADR/RID (cross-border): | |
| ADR/RID class | Not regulated |
| Air transport ICAO-TI and IATA-DGR: | |
| ICAO/IATA class | Not regulated |
| Additional information | This substance is considered to be non-hazardous for transport |
| Transport conditions | Transport at ambient temperature Routine storage after transport -28°C to -18°C |
| Maritime transport in bulk according to IMO instruments | Not regulated |

15. REGULATORY INFORMATION

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| Safety, health and environmental regulations/legislation specific for the product | Safety, health and environmental regulations/legislation specific for the substance or mixture | None |
| | Substances of Very High Concern. EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances for Eventual Inclusion in Annex XIV | None |
| | Substance subject to authorisation per REACH Annex XIV | None |
| | Restricted substances under EC 1907/2006, Annex XVII | None |
| | Regulation (EC) No 649/2012 (Rotterdam Convention - export/import of dangerous chemicals) | None |
| | Regulation (EU) No 2019/1021 (Stockholm Convention persistent organic pollutants) | None |
| | EU - Substances Depleting the Ozone layer (1005/2009) | None |
| | German Water hazard classes (Wassergefährdungsklassen) | Glycerol 56-81-5 (hazard class 1 - slightly hazardous to water) |
| Components of animal origin | Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (Animal by-products Regulation) | None |
| Chemical safety assessment | No Chemical safety assessment has been carried out | |

16. OTHER INFORMATION

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| Prepared by | Solis BioDyne / Technology specialist |
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| Reason for revision | Updates in sections 3, 8, 15, 16. |
| Revision number | 5 |
| Revision date | 30.06.2023 |
| SDS is valid 3 years from revision date. Contact info@solisbiodyne.com for latest revision. | |
| Last changes | Added information about H ₂ O, Tris-HCl, KCl, and RiboGrip® RNase inhibitor into section 3. Added more exposure limits to section 8. Restructured section 15 and changed to prepared by technology specialist in section 16. Added more abbreviations in section 16. |
| This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 and (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 | |
| <p>IMPORTANT: The information in this SDS is provided in good faith based on our knowledge as of the issue date (or subsequent revision date, if any), and is to be used only as a guide. This SDS does not constitute a guarantee (express or implied) of any kind and we make no warranties or merchantability or fitness for a particular purpose. This information relates only to the designated product as shipped and may not be valid if the product is used in combination with any other materials or is not used in accordance with our instructions. It is the responsibility of the buyer/user to ensure that its activities comply with all applicable governmental requirements. Since conditions of use of the product are not under the control of Solis BioDyne it is the duty of the buyer/user to determine the necessary conditions for the safe use of the product. Solis BioDyne will not be liable for any damages resulting from handling or contact with the product.</p> | |
| <p>Abbreviations: ADR/RID – Road Transport of Dangerous Material/International Carriage of Dangerous Goods by Rail. AGW – Time-weighted Average Concentration EC – European Commission CLP – Classification, Labelling and Packaging IATA-DGR – International Air Transport Association-Dangerous Goods Regulations ICAO-TI – International Civil Aviation Organization-Technical Instructions IMO – International Maritime Organization LD – Lethal Dose NBP – N-Butyl-2-pyrrolidone OEL – Occupational Exposure Limits PBT – Persistent Bioaccumulative Toxic PEL – Permissible Exposure Limits STEL – Short Term Exposure Limit STOT – Specific target organ toxicity TLV – Threshold Limit Value TWA – Time-Weighted Average</p> | |