

Kit components

SDS-04-52 v2
Revision date: 23.10.2024

KIT CATALOGUE NUMBER	PRODUCT NAME	KIT SIZE, RXN
04-52-0000S	SolisFAST® 1-step RT-PCR Kit with UNG	50 x 20 µl rxn
COMPONENT CAT. NO.	COMPONENT NAME	QUANTITY, PCS
04-51-0000S	4x One-step HOT SolisFAST® Mix with UNG	1
06-43-0000S	40x One-step RT Mix	1
05-15-01250	Water, nuclease free	1
05-22-0000S	5x AmpliBoost™ RT-PCR Enhancer	1

KIT CATALOGUE NUMBER	PRODUCT NAME	KIT SIZE, RXN
04-52-00050	SolisFAST® 1-step RT-PCR Kit with UNG	50 x 20 µl rxn
COMPONENT CAT. NO.	COMPONENT NAME	QUANTITY, PCS
04-51-0000S	4x One-step HOT SolisFAST® Mix with UNG	1
06-43-0000S	40x One-step RT Mix	1
05-15-01250	Water, nuclease free	1
05-22-0000S	5x AmpliBoost™ RT-PCR Enhancer	1

KIT CATALOGUE NUMBER	PRODUCT NAME	KIT SIZE, RXN
04-52-00200	SolisFAST® 1-step RT-PCR Kit with UNG	200 x 20 µl rxn
COMPONENT CAT. NO.	COMPONENT NAME	QUANTITY, PCS
04-51-00200	4x One-step HOT SolisFAST® Mix with UNG	1
06-43-00200	40x One-step RT Mix	1
05-15-00005	Water, nuclease free	1
05-22-00200	5x AmpliBoost™ RT-PCR Enhancer	1

KIT CATALOGUE NUMBER	PRODUCT NAME	KIT SIZE, RXN
04-52-01000	SolisFAST® 1-step RT-PCR Kit with UNG	1000 x 20 µl rxn
COMPONENT CAT. NO.	COMPONENT NAME	QUANTITY, PCS
04-51-00500	4x One-step HOT SolisFAST® Mix with UNG	2
06-43-01000	40x One-step RT Mix	1
05-15-00005	Water, nuclease free	4
05-22-01000	5x AmpliBoost™ RT-PCR Enhancer	1

Safety Data Sheets for individual kit components are provided below.

Safety Data Sheet

In accordance with Regulation (EU) 2020/878

Effective from: 13.06.2024 version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING	
Product name	4x One-step HOT SolisFAST® Mix with UNG
Catalog number	04-51-0000S, 04-51-00200, 04-51-01000
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 Office hours: 08 – 17, UTC+02:00 winter, UTC+03:00 summer EU Emergency Service Tel 112 Estonian Poison Information Center +372 794 3794
2. HAZARDS IDENTIFICATION	
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)	SCL, M-factor, ATE
H ₂ O	7732-18-5	231-791-2	-	<85	-	-
Glycerol	56-81-5	200-289-4	01211947198718-XXXX	<10	-	-
KCl	7447-40-7	231-211-8	-	<1	-	-
Tris-HCl	77-86-1	201-064-4	-	<4	-	-
BSA	9048-46-8	232-936-2	-	<0.1	-	-
Salini UNG® Uracil-N- Glycosylase	N/A	N/A	-	<0.1	-	-
HOT SolisFAST® DNA polymerase	N/A	N/A	-	<0.1	-	-
HGS DNA polymerase	N/A	N/A	-	<0.1	-	-
dATP	1927-31-7	217-662-3	-	<0.1	-	-
dCTP	2056-98-6	218-153-9	-	<0.1	-	-
dGTP	2564-35-4	219-887-2	-	<0.1	-	-
dUTP	102814-08-4	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 nanofoms) 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

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

Suitable extinguishing media	Dry chemical, CO ₂ , water spray 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

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

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

Occupational Exposure Limits

Chemical Name	Country	Limits
Glycerol 56-81-5	Australia	10 mg/m ³ (dust)
	Belgium (TWA)	10 mg/m ³
	Canada	10 mg/m ³
	Finland	20 mg/m ³
	France OEL (TLV)	10 mg/m ³
	Germany OEL (TWA)	200 mg/m ³ exposure factor 2
	Ireland	10 mg/m ³
	New Zealand	10 mg/m ³ (dust)
	Poland	10 mg/m ³ TWA
	Singapore	10 mg/m ³
	South Korea	10 mg/m ³
	Spain OEL (TWA)	10 mg/m ³
	Switzerland	100 mg/m ³ STEL 50 mg/m ³ TWA
	United Kingdom	10 mg/m ³ TWA (mist)
USA	15 mg/m ³ (total dust) 5 mg/m ³ (respirable)	

Exposure control

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

Physical state	Slightly viscous liquid
Color	Colorless
Odor	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
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

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

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	> 10 g/kg (Rabbit)	>2.75 mg/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

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

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.
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

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

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 authorization 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)No2019/1021 (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)	Gelatin BSA
Chemical safety assessment	No Chemical safety assessment has been carried out	

16. OTHER INFORMATION

Prepared by Solis BioDyne

Reason for revision Not Applicable

Revision number 1

Revision date 13.06.2024

SDS is valid 3 years from the revision date. Contact info@solisbiodyne.com for latest revision.

Last changes Not Applicable

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

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 the 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.

Abbreviations:

ADR/RID – Road Transport of Dangerous Material/International Carriage of Dangerous Goods by Rail.

EC – European Commission

ECHA – European Chemicals Agency

EU – European Union

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

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

STEL – Short Term Exposure Limit

STOT – Specific target organ toxicity

TLV – Threshold Limit Value

TWA – Time-Weighted Average



For further details and ordering please contact
info@solisbiodyne.com or call +372 740 9960

Safety Data Sheet

In accordance with Regulation (EU) 2020/878

Revision date: 13.06.2024 version 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING	
Product name	40x One-step RT Mix
Catalog number	06-43-0000S, 06-43-00200, 06-43-01000
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 Office hours: 08 – 17, UTC+02:00 winter, UTC+03:00 summer EU Emergency Service Tel 112 Estonian Poison Information Centre +372 794 3794

2. HAZARDS IDENTIFICATION	
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)	SCL, M-factor, ATE
H ₂ O	7732-18-5	231-791-2	-	<63	-	-
Glycerol	56-81-5	200-289-4	01211947198718-XXXX	<35	-	-
KCl	7447-40-7	231-211-8	-	<1	-	-
Tris-HCl	77-86-1	201-064-4	-	<1	-	-
FIREScript® Reverse Transcriptase	N/A	N/A	-	<0.1	-	-
SOLIScript® Reverse Transcriptase	N/A	N/A	-	<0.1	-	-
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

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

Suitable extinguishing media	Dry chemical, CO ₂ , water spray 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

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

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**Occupational Exposure Limits**

Chemical Name	Country	Limits
Glycerol 56-81-5	Australia	10 mg/m ³ (dust)
	Belgium (TWA)	10 mg/m ³
	Canada	10 mg/m ³
	Finland	20 mg/m ³
	France OEL (TLV)	10 mg/m ³
	Germany OEL (TWA)	200 mg/m ³ exposure factor 2
	Ireland	10 mg/m ³
	New Zealand	10 mg/m ³ (dust)
	Poland	10 mg/m ³ TWA
	Singapore	10 mg/m ³
	South Korea	10 mg/m ³
	Spain OEL (TWA)	10 mg/m ³
	Switzerland	100 mg/m ³ STEL 50 mg/m ³ TWA
	United Kingdom	10 mg/m ³ TWA (mist)
USA	15 mg/m ³ (total dust) 5 mg/m ³ (respirable)	

Exposure control

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

Physical state	Slightly viscous liquid
Color	Colorless
Odor	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
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

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

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	> 10 g/kg (Rabbit)	>2.75 mg/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

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

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.
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 according to 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

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

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 authorization 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)No2019/1021 (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	None

	derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (Animal by-products Regulation)	
Chemical safety assessment	No Chemical safety assessment has been carried out	

16. OTHER INFORMATION

Prepared by	Solis BioDyne
Reason for revision	Catalog numbers updated
Revision number	2
Revision date	13.06.2024

SDS is valid 3 years from the revision date. Contact info@solisbiodyne.com for latest revision.

Last changes	Catalog numbers updated
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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

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 the 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.

Abbreviations:

ADR/RID – Road Transport of Dangerous Material/International Carriage of Dangerous Goods by Rail.

EC – European Commission

ECHA – European Chemicals Agency

EU – European Union

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

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

STEL – Short Term Exposure Limit

STOT – Specific target organ toxicity

TLV – Threshold Limit Value

TWA – Time-Weighted Average

Important Note

Water, Nuclease Free

In accordance with European Directive 1999/45/EC and Regulations 1907/2006/EC and 1272/2008/EC the product „Water, nuclease free“ does not require a Safety Data Sheet as it contains a quantity not exceeding 1% of components classified as dangerous and not greater than 0.1% of components classified as carcinogenic. For this reason Solis BioDyne provides no safety data sheet for this product. Despite working with these or any other chemical is always advisable to use protective gloves, suitable clothing and goggles. Solis BioDyne assumes no liability for damage to property and / or injury resulting from use and contact with this product.

SDS-05-15 v3
Revision date: 30.06.2023

Safety Data Sheet

In accordance with Regulation (EU) No 830/2015

Effective date: 13.06.2024 version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING	
Product name	5x AmpliBoost™ RT-PCR Enhancer
Product number	05-22-0000S, 05-22-00200, 05-22-01000
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 Office hours: 08 – 17, UTC+02:00 winter, UTC+03:00 summer EU Emergency Service Tel 112 Estonian Poison Information Center +372 794 3794

2. HAZARDS IDENTIFICATION	
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)	SCL, M-factor, ATE
H ₂ O	7732-18-5	231-791-2	-	<65	-	-
Glycerol	56-81-5	200-289-4	01211947198718-XXXX	<32	-	-
Tris-HCl	77-86-1	201-064-4	-	<1	-	-
KCl	7447-40-7	231-211-8	-	<1	-	-
Tween20	9005-64-5	500-018-3	-	<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

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

Suitable extinguishing media	Dry chemical, CO ₂ , water spray 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

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

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Occupational Exposure Limits**

Chemical Name	Country	Limits
Glycerol 56-81-5	Australia	10 mg/m ³ (dust)
	Belgium (TWA)	10 mg/m ³
	Canada	10 mg/m ³
	Finland	20 mg/m ³
	France OEL (TLV)	10 mg/m ³
	Germany OEL (TWA)	200 mg/m ³ exposure factor 2
	Ireland	10 mg/m ³
	New Zealand	10 mg/m ³ (dust)
	Poland	10 mg/m ³ TWA
	Singapore	10 mg/m ³
	South Korea	10 mg/m ³
	Spain OEL (TWA)	10 mg/m ³
	Switzerland	100 mg/m ³ STEL 50 mg/m ³ TWA
	United Kingdom	10 mg/m ³ TWA (mist)
USA	15 mg/m ³ (total dust) 5 mg/m ³ (respirable)	

Exposure control

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

Physical state	Slightly viscous liquid
Appearance	Colorless
Odor	Not defined
pH value	7.0-9.0. Contact info@solisbodyne.com for specific information
Melting point	No data available
Boiling point	No data available
Flash point	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Explosive properties	No data available
Vapor pressure	No data available
Relative density	No data available
Water solubility	No data available
Solubility in other solvents	No data available

Partition coefficient	No data available
Viscosity	No data available
Oxidizing properties	No data available
Other information	No data available

10. STABILITY AND REACTIVITY

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

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	> 10 g/kg (Rabbit)	>2.75 mg/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

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

13. DISPOSAL CONSIDERATIONS

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.
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 according to 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

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

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 authorization 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
Components of animal origin	German Water hazard classes (Wassergefährdungsklassen)	Glycerol 56-81-5 (hazard class 1 - slightly hazardous to water)
	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

Prepared by	Solis BioDyne
Reason for revision	Not Applicable
Revision number	1

Revision date	13.06.2024
SDS is valid 3 years from the revision date. Contact info@solisbiodyne.com for latest revision.	
Last changes	Not Applicable
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 the 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. EC – European Commission ECHA – European Chemicals Agency EU – European Union 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 REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 STEL – Short Term Exposure Limit STOT – Specific target organ toxicity TLV – Threshold Limit Value TWA – Time-Weighted Average</p>	