

Safety Data Sheet

In accordance with Regulation (EU) 2020/878

Revision date: 16.06.2023 version 3

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING		
Product name	HOT FIREPol [®] EvaGreen [®] HRM Mix (no ROX), 5x	
Catalog number	08-31-0000S, 08-31-00001, 08-31-00001-5, 08-31-00001-10, 08-31-00020	
REACH registration number	Not applicable	
ECHA registration number (EC-No)	Not applicable	
Unique formula identifire (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 <u>info@solisbiodyne.com</u> 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	
Classificaton 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:

					Classification according to Regulation (EC) No 1272/2008 (CLP)		
Component	CAS-No.	EC-No.	REACH reg No	Conc % (w/w)	Pictogram, signal word code (s)	Hazard class and category code (s)	Hazard statement code (s)
H ₂ O	7732-18-5	231-791-2	-	<90	-	-	-
Glycerol	56-81-5	200-289-5	01211947198718- XXXX	<9	-	-	-
MgCl ₂	7791-18-6	232-094-6	-	<1	-	-	-
HOT FIREPol [®] DNA Polymerase	N/A	N/A	-	<0.1	-	-	-
dGTP	2564-35-4	219-887-2	-	<0.1	-	-	-
dCTP	2056-98-6	218-153-9	-	<0.1	-	-	-
dATP	1927-31-7	217-662-3	-	<0.1	-	-	-
dTTP	365-08-2	206-669-7	-	<0.1	-	-	-
EvaGreen [®] dye	N/A	N/A	-	<0.1	-	-	-
BSA	9048-46-8	232-936-2	-	<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 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	
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			
Exposure Limits			
Chemical Name	Country	Limits	
	Belgium (TWA)	10 mg/m ³	
	Czech Republic	10 mg/m³ TWA 15 mg/m³ Ceiling	
	France OEL (TLV)	10 mg/m ³	
	Germany OEL (TWA)	200 mg/m ³ exposure factor 2	
	Poland	10 mg/m ³ TWA	
Glycerol 56-81-5	Portugal	10 mg/m ³ TWA	
	Spain OEL (TWA)	10 mg/m ³	
	Switzerland	100 mg/m³ STEL 50 mg/m³ TWA	
	United Kingdom	10 mg/m ³ 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		
Physical state	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
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

Acute toxicicity	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 irritatio	n	
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 toxicicity	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	
Othe 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-borde	er):	
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 environmetal 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)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	Fish gelatin

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

16. OTHER INFORMATION		
Prepared by	Solis BioDyne / Technology specialist	
Reason for revision	Revised according (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 (REACH)	
Revision number	3	
Revision date	16.06.2023	
SDS is valid 3 years from re	evision date. Contact info@solisbiodyne.com for latest revision.	
1 +	Added UFI, endocrine disruptors and nanforms information and formal	

Last changes	Added OFT, endocrine disruptors and naniorms information and
	changes in all sections except 4, 5, 6 and 10.

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

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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



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