Optifuse

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 01/01/2022 Revision date: 04/01/2023 Supersedes version of: 01/01/2022 Version: 1.1

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

1.1. Product identifier

Product form : Mixture
Product name : Optifuse

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial
For professional use only
Use of the substance/mixture : Shading paint for greenhouses

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer
Lumiforte EMEA SAS
1 Rue Gaston Monmousseau, 1
38130 Echiroles Echirolles
France
T +33 (0)4 76 23 20 54
safety@lumiforte.com - www.lumiforte.com

Manufacturer
Lumiforte EMEA B.V.
Geerstraat 8
5111 PS Baarle-Nassau
Netherlands
T +31 (0)1 35 07 53 99
safety@lumiforte.com - www.lumiforte.com

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

EUH-statements : EUH208 - Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5), Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [N. CE 247-500-7] and 2-methyl-2H - isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9). May produce an allergic reaction.
EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [N. CE 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)(55965-84-9)	The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6	< 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400
Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [N. CE 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	CAS-No.: 55965-84-9 EC Index-No.: 613-167-00-5	< 1	Acute Tox. 2 (Inhalation), H330 Acute Tox. 2 (Dermal), H310 Acute Tox. 3 (Oral), H301 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Fire will produce dense black smoke. Decomposition products may be a hazard to health.
Hazardous decomposition products in case of fire : Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : For further information refer to section 8 "Exposure controls/personal protection". Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

Concerning personal protective equipment to use, see item 8. See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well-ventilated place. Keep out of frost. Keep container closed when not in use. Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:
Safety glasses. Avoid all unnecessary exposure. Protective clothing. Gloves.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:
DIN EN 166. Chemical goggles or safety glasses

8.2.2.2. Skin protection

Hand protection:
Chemical resistant gloves (according to European standard NF EN 374 or equivalent). nitrile rubber. PVC. Butyl rubber. Wear protective gloves.

8.2.2.3. Respiratory protection

Respiratory protection:
Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:
Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	milky.
Odour	:	neutral.
Odour threshold	:	Not available
Melting point	:	Not available

Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Non flammable.
Explosive properties	:	None.
Explosive limits	:	Not available
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	6.5 – 7.5
Viscosity, kinematic	:	19.802 mm^2/s
Viscosity, dynamic	:	20 °C
Solubility	:	insoluble in water. In water, the material disperses.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50 °C	:	Not available
Density	:	1.01 g/cm^3
Relative density	:	Not available
Relative vapour density at 20 °C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
LD50 oral rat	1193 mg/kg
LD50 dermal rat	4115 mg/kg/d

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [N. CE 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9)	
LD50 oral rat	457 mg/kg
LD50 dermal rat	> 1000 mg/kg
LD50 dermal rabbit	660 mg/kg
LC50 Inhalation - Rat	1.29 mg/l/4h

Skin corrosion/irritation : Not classified
pH: 6.5 – 7.5
Additional information : Based on available data, the classification criteria are not met
Serious eye damage/irritation : Not classified
pH: 6.5 – 7.5
Additional information : Based on available data, the classification criteria are not met
Respiratory or skin sensitisation : Not classified
Additional information : Based on available data, the classification criteria are not met
Germ cell mutagenicity : Not classified
Additional information : Based on available data, the classification criteria are not met
Carcinogenicity : Not classified
Additional information : Based on available data, the classification criteria are not met
Reproductive toxicity : Not classified
Additional information : Based on available data, the classification criteria are not met
STOT-single exposure : Not classified
Additional information : Based on available data, the classification criteria are not met
STOT-repeated exposure : Not classified
Additional information : Based on available data, the classification criteria are not met
Aspiration hazard : Not classified
Additional information : Based on available data, the classification criteria are not met

Optifuse	
Viscosity, kinematic	19.802 mm^2/s

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No data available.
Ecology - water : No data available on ecotoxicity.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
LC50 - Fish [1]	2.18 mg/l 96h, Oncorhynchus mykiss

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
EC50 - Crustacea [1]	2.94 mg/l 48h
ErC50 algae	0.11 mg/l 72 h, Pseudokirchneriella subcapitata

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [N. CE 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9)	
LC50 - Fish [1]	1.57 mg/l 96 h
LC50 - Fish [2]	0.19 mg/l 96 h Oncorhynchus mykiss
EC50 - Crustacea [1]	0.16 mg/l 48 h
EC50 - Crustacea [2]	0.34 mg/l 48 h
EC50 - Other aquatic organisms [2]	0.027 mg/l 72 h Scenedesmus capricornutum

12.2. Persistence and degradability

Optifuse	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Optifuse	
Bioaccumulative potential	Not established.

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
Partition coefficient n-octanol/water (Log Pow)	1.3

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [N. CE 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9)	
Partition coefficient n-octanol/water (Log Pow)	-0.486

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR)	:	Not applicable
UN-No. (IMDG)	:	Not applicable
UN-No. (IATA)	:	Not applicable
UN-No. (ADN)	:	Not applicable
UN-No. (RID)	:	Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR)	:	Not applicable
Proper Shipping Name (IMDG)	:	Not applicable
Proper Shipping Name (IATA)	:	Not applicable
Proper Shipping Name (ADN)	:	Not applicable
Proper Shipping Name (RID)	:	Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Packing group (IATA)	:	Not applicable
Packing group (ADN)	:	Not applicable
Packing group (RID)	:	Not applicable

14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	No
Other information	:	No supplementary information available

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.
Please see https://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:	
Acute Tox. 2 (Dermal)	Acute toxicity (dermal), Category 2
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4

Full text of H- and EUH-statements:	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5), Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [N. CE 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9). May produce an allergic reaction.
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.