



SAFETY DATA SHEET

Stardrops 4-1n-1 Pine Disinfectant Spray

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

1.1. Product identifier

Product name	Stardrops 4-1n-1 Pine Disinfectant Spray
Product number	BLE463
UFI	UFI: 7R81-708H-S00X-PQ92

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

Identified uses	Disinfectant.
Uses advised against	Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Supplier	Star Brands EU, c/o Allegro, Innovation Factory, Belfast, BT12 7DG Star Brands Limited 1175 Thorpe Park, Century Way, Leeds, LS15 8ZB England UK +44 (0) 113 2666 300 +44 (0) 113 2666 690 sds@starbrandsltd.co.uk
Contact person	sds@starbrandsltd.co.uk

1.4. Emergency telephone number

Emergency telephone	+44 (0) 113 2666 300 (09.00-17.00 Mon-Fri)
National emergency telephone number	UK: 0844 892 0111 (healthcare professionals only, 24/7)/ NHS 111 (public, 24/7) Dublin: +353 1 8092566 (public, 8am - 10pm, 7/7) +353 01 809 2566 (Professionals, 24/7) EU: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified

2.2. Label elements

Stardrops 4-1n-1 Pine Disinfectant Spray

Hazard statements	EUH208 Contains Pine Oil. May produce an allergic reaction.
Precautionary statements	P102 Keep out of reach of children. P103 Read label before use. P260 Do not breathe vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P501 Dispose of contents/ container in accordance with local regulations.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Propan-2-ol 1-5% CAS number: 67-63-0 EC number: 200-661-7
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336
Pine Oil <1% CAS number: 8002-09-3 EC number: 232-268-1 M factor (Acute) = 1 M factor (Chronic) = 1
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Keep affected person warm and at rest. Do not induce vomiting unless under the direction of medical personnel. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues. If in doubt, get medical attention promptly.
Skin contact	Remove contamination with soap and water or recognised skin cleansing agent. Get medical attention if symptoms are severe or persist.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse cautiously with water for several minutes. Get medical attention immediately. Continue to rinse.

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

General information	The product is considered to be a low hazard under normal conditions of use. See Section 11 for additional information on health hazards.
----------------------------	---

Stardrops 4-1n-1 Pine Disinfectant Spray

Inhalation	The product is considered to be a low hazard under normal conditions of use.
Ingestion	The product is considered to be a low hazard under normal conditions of use. May be harmful if swallowed.
Skin contact	Prolonged skin contact may cause temporary irritation. Skin irritation should not occur when used as recommended. May cause an allergic skin reaction.
Eye contact	May cause discomfort.

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

Notes for the doctor	Treat symptomatically.
Specific treatments	No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. Extinguish with the following media: Foam, carbon dioxide or dry powder.
-------------------------------------	--

5.2. Special hazards arising from the substance or mixture

Specific hazards	The product is non-combustible. The product is not flammable.
Hazardous combustion products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
--	---

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid inhalation of vapours. Avoid contact with eyes and prolonged skin contact. Use recommended protective equipment, see section 8. Ensure good ventilation.
For non-emergency personnel	Remove persons for safety reasons
For emergency responders	Wear breathing apparatus if exposed to vapours/spray/gases

6.2. Environmental precautions

Environmental precautions	Not considered to be a significant hazard due to the small quantities used. Avoid discharge into drains or watercourses or onto the ground.
----------------------------------	---

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Dispose of contents/container in accordance with local regulations.
--------------------------------	--

6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.
------------------------------------	---

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Stardrops 4-1n-1 Pine Disinfectant Spray

Usage precautions	Avoid contact with eyes and prolonged skin contact. Avoid inhalation of vapours and spray/mists. Provide adequate ventilation.
Advice on general occupational hygiene	When using do not eat, drink or smoke. Wash contaminated skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	This product should be kept inaccessible to small children and well separated from products intended to be consumed. Store cool and only in original packaging.
----------------------------	---

Storage class	Unspecified storage.
----------------------	----------------------

7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
----------------------------	---

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

Swedish National Occupational limit values. Ref: AFS 2018 : 1

Propan-2-ol

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

Pine Oil

Limonene (component in terpinolene multi constituent), 25 ppm, 140 mg/m³ (8 hr); 50 ppm, 300mg/m³ (15min)

WEL = Workplace Exposure Limit.

Propan-2-ol (CAS: 67-63-0)

DNEL	Industry - Dermal; Long term systemic effects: 888 mg/kg/day
	Industry - Inhalation; Long term systemic effects: 500 mg/m ³
	Consumer - Dermal; Long term systemic effects: 319 mg/kg/day
	Consumer - Inhalation; Long term systemic effects: 89 mg/m ³
	Consumer - Oral; Long term systemic effects: 26 mg/kg/day

PNEC	Fresh water; 140.9 mg/l
	marine water; 140.9 mg/l
	Intermittent release; 140.9 mg/l
	STP; 2251 mg/l
	Sediment (Freshwater); 552 mg/kg
	Sediment (Marinewater); 552 mg/kg
Soil; 28 mg/kg	

Pine Oil (CAS: 8002-09-3)

Stardrops 4-1n-1 Pine Disinfectant Spray

DNEL	Workers - Dermal; Long term systemic effects, (Terpineol multi constituent): 1.17 mg/cm ²
	Workers - Dermal; Short term systemic effects: 5 mg/cm ²
	Workers - Inhalation; Long term systemic effects: 5.8 mg/m ³
	Workers - Inhalation; Short term systemic effects: 5.8 mg/cm ²
	General population - Dermal; Long term systemic effects: 0.42 mg/cm ²
	General population - Dermal; Short term local effects: 2.5 mg/cm ²
	General population - Inhalation; Long term systemic effects: 1.125 mg/m ³
	General population - Inhalation; Short term systemic effects: 1.25 mg/m ³
	General population - Oral; Long term systemic effects: 0.42 mg/kg
	General population - Oral; Short term systemic effects: 2.5 mg/kg
PNEC	Fresh water; 62 µg/L
	marine water; 6.2 µg/L
	STP; 2.57 mg/l
	Sediment (Freshwater); 0.442 mg/kg
	Sediment (Marinewater); 0.044 mg/kg
	Soil; 0.052 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Avoid inhalation of vapours and spray/mists. Provide adequate ventilation.

Eye/face protection

Wear eye protection.

Hand protection

Wear protective gloves made of the following material: Nitrile Gloves Nitrile rubber. Polyvinyl chloride (PVC). It should have a minimum thickness of 0.55mm Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Wash hands thoroughly after handling. Do not smoke in work area.

Respiratory protection

No specific requirements are anticipated under normal conditions of use.

Environmental exposure controls

Ensure all engineering measures mentioned in section 7 of this SDS are in place

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Turquoise.
Odour	Pine.
Odour threshold	No specific test data are available.
pH	pH (concentrated solution): 9.5 - 10.5
Melting point	Not applicable.
Initial boiling point and range	Not available.

Stardrops 4-1n-1 Pine Disinfectant Spray

Flash point	This product does not sustain combustion.
Evaporation rate	No information available.
Evaporation factor	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not applicable.
Vapour pressure	Not known.
Vapour density	Not known.
Relative density	0.99 - 1.005 g/ml @ 20°C
Bulk density	Not determined.
Solubility(ies)	Soluble in water.
Partition coefficient	Data lacking.
Auto-ignition temperature	Not known.
Decomposition Temperature	Not determined.
Viscosity	Not applicable.
Explosive properties	Not applicable.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Refractive index	No information required.
Particle size	No specific test data are available.
Molecular weight	No information required.
Volatility	Not available.
Saturation concentration	Not applicable.
Critical temperature	Not applicable.
Volatile organic compound	No information required.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
-------------------	---

10.2. Chemical stability

Stability	No particular stability concerns.
------------------	-----------------------------------

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
---	--

10.4. Conditions to avoid

Stardrops 4-1n-1 Pine Disinfectant Spray

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects We have not carried out any animal testing for this product. Any ATE figures quoted below are from Toxicity Classifications that have been carried out using ATE (Acute Toxicity Estimate) Calculation Method using LD50 or ATE figures provided by the Raw Material Manufacturer.

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation May produce an allergic reaction.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Based on the available information, classification criteria are not met.

Stardrops 4-1n-1 Pine Disinfectant Spray

Toxicological information on ingredients.

Propan-2-ol

Acute toxicity - oral

Acute toxicity oral (LD₅₀
mg/kg) 4,570.0

Species Rat

ATE oral (mg/kg) 4,570.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀
mg/kg) 13,400.0

Species Rabbit

ATE dermal (mg/kg) 13,400.0

Acute toxicity - inhalation

Acute toxicity inhalation
(LC₅₀ vapours mg/l) 30.0

Species Rat

ATE inhalation (vapours
mg/l) 30.0

Pine Oil

Acute toxicity - oral

Acute toxicity oral (LD₅₀
mg/kg) 2,001.0

Species Rat

ATE oral (mg/kg) 2,001.0

Acute toxicity - inhalation

Acute toxicity inhalation
(LC₅₀ dust/mist mg/l) 4.76

Species Rat

ATE inhalation
(dusts/mists mg/l) 4.76

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 250 mg/kg/day, Oral,

SECTION 12: Ecological information

12.1. Toxicity

Toxicity The product contains a substance which is harmful to aquatic organisms.

Ecological information on ingredients.

Propan-2-ol

Acute aquatic toxicity

Stardrops 4-1n-1 Pine Disinfectant Spray

Acute toxicity - fish	LC ₅₀ , 48 hours: > 100 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: > 100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: > 100 mg/l, Scenedesmus subspicatus

Pine Oil

Acute aquatic toxicity

LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 62 - 80 mg/l, Fish
Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hours: 73 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 68 mg/l, Algae NOEC, 72 hours: 3.9 mg/l, Algae
Acute toxicity - microorganisms	EC ₅₀ , 3 hours: 178 mg/l, Activated sludge
Acute toxicity - terrestrial	NOEC, 14 days: 311 mg/kg, Eisenia Fetida (Earthworm)

Chronic aquatic toxicity

M factor (Chronic)	1
---------------------------	---

12.2. Persistence and degradability

Persistence and degradability The product is biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient Data lacking.

12.4. Mobility in soil

Mobility The product is miscible with water and may spread in water systems.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

12.6. Other adverse effects

Other adverse effects Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information The generation of waste should be minimised or avoided wherever possible. Dispose of waste product or used containers in accordance with local regulations

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Stardrops 4-1n-1 Pine Disinfectant Spray

Waste class The waste code classification is to be carried out according to the European Waste Catalogue (EWC).

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

Road transport notes Not regulated.

Rail transport notes Not regulated.

Sea transport notes Not classified.

Air transport notes Not classified.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not regulated.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Ensure that persons transporting the product know what to do in the event of an accident or spillage. Always transport in closed containers that are upright and secure.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not relevant.

**Annex II of MARPOL 73/78
and the IBC Code**

SECTION 15: Regulatory information

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

National regulations Swedish Hygiene Limits (AFS 2018: 1), Regulations

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Stardrops 4-1n-1 Pine Disinfectant Spray

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 GHS: Globally Harmonized System.
 LC50: Lethal Concentration to 50 % of a test population.
 LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PNEC: Predicted No Effect Concentration.
 REACH: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577.
 SVHC: Substances of Very High Concern.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted acute toxicity point estimate.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)
 Asp. Tox. = Aspiration hazard
 Carc. = Carcinogenicity
 STOT RE = Specific target organ toxicity-repeated exposure
 STOT SE = Specific target organ toxicity-single exposure
 Eye Dam. = Serious eye damage
 Met. Corr. = Corrosive to metals
 Skin Corr. = Skin corrosion
 Skin Irrit. = Skin irritation
 Skin Sens. = Skin sensitisation

Revision date 05/07/2022
Revision 5
Supersedes date 01/07/2022
SDS number 5911

Stardrops 4-1n-1 Pine Disinfectant Spray

Hazard statements in full

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

EUH208 Contains Pine Oil. May produce an allergic reaction.