



Safety Data Sheet

Green Virucidal Cleaner and Disinfectant

v1.2.2 11-11-2020

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

1.1 Product identifier

Product Name *Hadron Green Virucidal Disinfectant Cleaner-UDF2/3*

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

Use of the substance/mixture Disinfectant

1.3 Details of the supplier of the safety data sheet

Company	Hadron Group Ltd.
Address	Jubilee House Gelders Hall Road Shepshed Loughborough LE12 9NH
Telephone	+44 800 068 1331
Email address	info@hadrongroup.co.uk
Emergency telephone number	+44 800 068 1331

Section 2: Hazards Identification

2.1 Classification of the substance or mixture

CLP This product is not classified

2.2 Label elements

The substance/mixture does not meet the criteria for classification, but the following labelling must be applied.

EUH210 Safety data sheet available on request

2.3 Other hazards

PBT/vPvB This product does not contain any PBT or vPvB substances

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Section 3: Composition/information on ingredients

3.1 Mixtures

This product contains

Water
Surfactants
Active Substances (\pm) Tartaric acid, Lactic acid, Peppermint oil, Lavender oil.

CLP:

%	CAS-No.	EC No.	REACH Reg No.	Chemical Name	Hazard Classification
5-<10	64-17-5	200-578-6	01-2119457610-43-	Ethanol*	Flam. Liq. 2; H225 Eye Irrit. 2; H319
1-<5	5131-66-8	225-878-4	01-2119475527-28-	3-Butoxypropan-2-ol	Eye Irrit. 2; H319 Skin Irrit. 2; H315

*Concentration limits: $\geq 50\%$: Eye Irrit. 2; H319

For full text of H-Statements refer to section 16.

Section 4: First aid measures

4.1 Description of first aid measures

First aid measures after:

Inhalation	Move into fresh air and keep at rest
Skin contact	Remove contaminated clothes and rinse skin thoroughly with water.
Eye contact	Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses and open eyelids widely. If irritation persists, seek medical attention.
Ingestion	Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions.

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

Symptoms/effects	See section 11 for more detailed information on health effects and symptoms
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4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.



Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Specific hazards

During fire, gases hazardous to health may be formed.

5.3 Advice for firefighters

Protective equipment for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Personal precautions

Avoid contact with eyes and prolonged skin contact. Follow precautions for safe handling described in this safety data sheet.

6.2 Environmental precautions

Environmental precautions

Can enter the local sewage treatment plant up till 256 kgs per day without risk. Avoid discharge onto soil.

6.3 Methods and material for containment and cleaning up

Method for cleaning up

Absorb with absorbing material or flush into sewer.

6.4 References to other sections

For personal protection refer to section 8

For disposal considerations refer to section 13

Section 7: Handling and storage

7.1 Precautions for safe handling

Personal precautions

Avoid contact with skin and eyes. Observe good chemical hygiene practises.

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Technical measures	Keep the workplace clean.
Technical precautions	Mechanical ventilation may be required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas	No special precautions
Storage conditions	Store in closed original container at temperatures between 5°C and 30°C

7.3 Specific end use(s)

Not relevant.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits:

CAS-No.	Chemical name:	As	Exposure limits	Type	Notes	References
64-17-5	Ethanol	-1000ppm	1920 mg/m ³	TWA	-	EH40

Notes: EH40: EH40/2005

8.2 Exposure controls

Engineering measures:	Provide adequate ventilation.
Respiratory equipment	Under normal conditions of use respiration protection should not be required.
Hand protection	Under normal conditions of use gloves are not normally required.
Eye protection	Under normal conditions of use eye protection is not required.
Hygiene measures	Wash hands after handling. Change contaminated clothing.
Environmental Exposure Controls	Not available
DNEL	3-Butoxypropan-2-ol: Workers - Dermal; Long term systemic effects: 52 mg/kg/day Workers - Inhalation; Long term systemic effects: 147 mg/m ³ Consumer - Dermal; Long term systemic effects: 22 mg/kg/day Consumer - Inhalation; Long term systemic effects: 43 mg/m ³ Consumer - Oral; Long term systemic effects: 12.5 mg/kg/day



Ethanol:
Workers Exposure routes: Inhalation. Potential health effects:
Acute effects,
Local effects. Value: 1900 mg/m³
Workers. Exposure routes: Skin contact. Potential health effects: Chronic effects. Value: 343 mg/kg
Workers. Exposure routes: Inhalation. Potential health effects: Chronic effects. Value: 950 mg/m³
Consumers. Exposure routes: Inhalation. Potential health effects: Acute effects, Local effects. Value: 950 mg/m³
Consumers. Exposure routes: Skin contact. Potential health effects: Chronic effects. Value: 206 mg/kg
Consumers. Exposure routes: Inhalation. Potential health effects: Chronic effects. Value: 114 mg/m³
Consumers. Exposure routes: Ingestion. Potential health effects: Chronic effects. Value: 87 mg/kg

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Liquid
Odour	Not available
pH	2.3-2.5
Melting point/range	Not applicable
Boiling point/range	~ 100°C
Flash point	45.5°C – No sustained combustibility
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Not applicable
Vapour pressure	No data available
Relative vapour density at 20°C	No data available
Relative density	~ 1
Density	1-1.01
Solubility	Miscible with water
Partition coefficient n-octanol/water (Log-Pow)	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available

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Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

9.2 Other information

No additional information available

Section 10: Stability and reactivity

10.1 Reactivity

None known

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

Heating. Avoid Frost.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

None at ambient temperatures.

Section 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral)	Based on available data, the classification criteria are not met.
Acute toxicity (dermal)	Based on available data, the classification criteria are not met.
Acute toxicity (inhalation)	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.

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Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive Toxicity	Based on available data, the classification criteria are not met.
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Inhalation	Not relevant at normal room temperatures
Skin contact	Prolonged contact may cause redness and pain
Eye contact	May irritate and cause redness and pain
Ingestion	May irritate and cause malaise
Specific effects	None known
Toxicological data	Ethanol: Acute Toxicity (Dermal LD50): >2000 mg/kg (Rabbit) Acute Toxicity (Oral LD50): >2000 mg/kg (Rat) 3-Butoxypropan-2-ol: Acute Toxicity (Inhalation LC50): >3.5 mg/l/4h (inh-Rat) Acute Toxicity (Dermal LD50): >2000 mg/kg (Rat) Acute Toxicity (Oral LD50): 3300 mg/kg (Rat) Lactic acid: Acute Toxicity (Oral LD50): 3730 mg/kg (Rat) (+)-Tartaric acid: Acute Toxicity (Dermal LD50): > 2000 mg/kg (Rabbit) Acute Toxicity (Oral LD50): > 2000 mg/kg (Rat)

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Section 12: Ecological information

12.1 Toxicity

Ecotoxicity

Ethanol:

LC50 (Fish/Leuciscus idus)/48 h: >100 mg/l

EC50 (Daphnia/Daphnia magna)/24 h: >100 mg/l

3-Butoxypropan-2-ol:

LC50 (Fish/Poecilia reticulata)/96 h: 560-1000 mg/l

EC50 (Daphnia/Daphnia magna)/48 h: >1000 mg/l

(+)-Tartaric acid:

LC50 (Fish/Danio rerio)/96 h: > 100 mg/l

EC50 (Algae/Selenastrum capricornutum)/72 h: 51.4 mg/l

12.2 Persistence and degradability

Degradability

There are no data on the degradability of this product. Readily biodegradable: Ethanol, (+)-Tartaric acid, Lactic acid, 3-Butoxypropan-2-ol

12.3 Bioaccumulative potential

Bioaccumulative potential

The product is not expected to bioaccumulate. (+)-Tartaric acid, Lactic acid, Ethanol: log Kow < 1

12.4 Mobility in soil

Bioaccumulative potential

Mobile. (+)-Tartaric acid, Lactic acid, Ethanol: log Kow ≤ 1

12.5 Results of PBT and vPvB assessment

PBT/vPvB

This product does not contain any PBT or vPvB substances.

12.6 Other adverse effects

None known.

Section 13: Disposal considerations

13.1 Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

Waste from residues

EWC-code: 07 04 99

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Section 14: Transport information

This product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR, RID)

14.1 UN number	-
14.2 UN proper shipping name	-
14.3 Transport hazard class(es)	-
14.4 Packing group	-
14.5 Environmental hazards	
Marine pollutant	-
Environmentally Hazardous substance	-
14.6 Special precautions for user	
None known	
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code	
Transport in bulk	Not relevant

Section 15: Regulatory information

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

National regulation:

18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, with amendments. 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 with amendments. The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No.2677) with amendments. EH40/2005, Workplace exposure limits 2005, with amendments. The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

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Section 16: Other information

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions. The following sections contain revisions or new statements: 3, 6, 8.

16.1 Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Chemical Abstract Services
CLP	Classification Labelling Packaging Regulation, Regulation (EC) No 1272/2008
DNEL	Derived No Effect Level
EC-No.	European Community Number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median Lethal Concentration
LD50	Median Lethal Dose
PBT	Persistent, Bio accumulative and Toxic Substance
REACH	Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
SDS	Safety Data Sheet
vPvB	Very Persistent, and Very Bioaccumulative

16.2 Full text of H- and EUH-Statements

H225	Highly flammable liquid and vapour
H315	Causes skin irritation
H319	Causes serious eye irritation

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.