

Safety Data Sheet

According to REACH Regulation (1907/2006) as retained in UK law by UK REACH (SI 2019/758), as amended and EU CLP Regulation (1272/2008) & GB CLP Issue date: 04/04/2022 Revision date: 18/12/2024 Supersedes version of: 19/04/2024 Version: 1.02

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

1.1. Product identifier	
Product name Product code	: BioHygiene Odour Stopper & Stain Spotter : BH043
1.2. Relevant identified uses of the subs	tance or mixture and uses advised against
Relevant identified uses	
Main use category Use of the substance/mixture	 Professional use Enzymatic preparation for breaking down protein-based waste residues, thereby reducing attendant malodours.
Uses advised against	
Restrictions on use	: Not for direct application to food stuffs, Not for oral consumption
1.3. Details of the supplier of the safety	data sheet
BioHygiene Unit A – D 12 , Pant Glas Industrial Estate Bedwas Caerphilly CF83 8GE UK T +44 (0) 29 2067 4094	

<u>info@biohygiene.co.uk</u>

1.4. Emergency telephone number

Emergency number

: +44 (0) 29 2067 4094 (8am to 5pm)

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	NHS 111/NHS 24/NHS Direct		111 0845 4647	or call a doctor

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

Contains enzymes avoid breathing product spray. Presents no particular risk to the environment.

2.2. Label elements

According to EC directives or the corresponding national regulations there is no labelling obligation for this product. No labelling applicable

2.3. Other hazards

 $Other \ hazards \ which \ do \ not \ result \ in \ \ classification \ : \ \ Contains \ enzymes \ avoid \ breathing \ product \ spray.$

This mixture is not considered to be persistent, bioaccumulating and toxic (PBT) This mixture is not considered to be persistent, bioaccumulating and toxic (PVB) Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

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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 substance(s) are 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

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2,2-dimethyl-1,3-dioxolan-4-ylmethanol	CAS-No.: 100-79-8 EC-No.: 202-888-7 REACH-no: 01-2120066005- 66-XXXXX	≥1-<3	Eye Irrit. 2, H319

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 First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact	 If you feel unwell, seek medical advice (show the label where possible). Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effe	ects, both acute and delayed
Symptoms/effects	: To our knowledge, the product does not present any particular risk, under normal conditions of use.
Symptoms/effects after inhalation	: Slightly irritating to the respiratory system.
Symptoms/effects after skin contact	: May cause skin irritation.
Symptoms/effects after eye contact	: May cause slight irritation to eyes.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract.

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Dry powder. Foam. Carbon dioxide.
5.2. Special hazards arising from the substa	ance or mixture
Fire hazard Explosion hazard Reactivity in case of fire Hazardous decomposition products in case of fire	 Not flammable. Product is not explosive. Product is not explosive. On heating irritating fumes to eyes or skin may be produced.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measu	ıres
6.1. Personal precautions, protective equi	pment and emergency procedures
General measures	: Ventilate spillage area.
For non-emergency personnel	
Protective equipment	: Avoid contact with skin.
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes.
For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
No special environmental precautions required	J.
6.3. Methods and material for containmen	t and cleaning up

For containment	: Stop leak without risks if possible.
Methods for cleaning up Other information	Clean contaminated surfaces with an excess of water.Small amount of unwanted product may be flushed with water to sewer.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed Precautions for safe handling Hygiene measures	 Not expected to present a significant hazard under anticipated conditions of normal use. Work in a well-ventilated area. Always wash hands after handling the product.
7.2. Conditions for safe storage, including	ng any incompatibilities
Technical measures Storage conditions Incompatible products	 Does not require any specific or particular technical measures. Store in a dry place. Store in a closed container. Keep cool. Strong acids. Strong alkalis.

7.3. Specific end use(s)

Odour remover and stain spotter spray.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

BioHygiene Odour Stopper & Stain Spotter	
United Kingdom - Occupational Exposure Limits	i
Remark	Contains no substances with occupational work exposure limits.
DNEL and PNEC	
C08-10 Alkyl glucoside (68515-73-1)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	595000 mg/kg bodyweight/day

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C00 40 Allud alug golds (00545 70 4)	
C08-10 Alkyl glucoside (68515-73-1)	
Long-term - systemic effects, inhalation	420 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	35.7 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	124 mg/m³
Long-term - systemic effects, dermal	357000 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.176 mg/l
PNEC aqua (marine water)	0.0176 mg/l
PNEC aqua (intermittent, freshwater)	0.27 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	1516 mg/kg dwt
PNEC sediment (marine water)	0.152 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.654 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	111.11 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	560 mg/l
2,2-dimethyl-1,3-dioxolan-4-ylmethanol (100-7	⁷ 9-8)
PNEC (Water)	
PNEC aqua (freshwater)	200 µg/l
PNEC aqua (marine water)	200 µg/l
PNEC aqua (intermittent, freshwater)	90 μg/l
PNEC (Sediment)	·
PNEC sediment (freshwater)	1183.16 µg/kg dw
PNEC sediment (marine water)	118.3 µg/kg dw
PNEC (Soil)	•
PNEC soil	2.5 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l
8.2. Exposure controls	•

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:

No special requirement . Avoid contact with eyes. Ensure spraying away from persons.

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Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Eye protection not applicable. Avoid contact with eyes. Ensure spraying away from persons

Skin protection

Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use

Hand protection:

In case of repeated or prolonged contact wear gloves. Always wash hands after handling the product

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves, Type C	Nitrile rubber (NBR)	1 (> 10 minutes)			EN ISO 374
Reusable gloves, Type A	Nitrile rubber (NBR)	2 (> 30 minutes)	>0.38mm		EN ISO 374

Other skin protection Materials for protective clothing: Not applicable.

Respiratory protection

Respiratory protection:

Not necessary with sufficient ventilation. Contains enzymes avoid breathing product spray.

Thermal hazards

Thermal hazard protection: Not required.

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and che	mical properties
9.1. Information on basic physic	al and chemical properties
Physical state	: Liquid
Colour	: Colourless.
Appearance	: Liquid.
Odour	: Pleasant.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not flammable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
рН	: 6-8
Viscosity, kinematic	: Not available
Solubility	: Easily soluble.

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Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1 – 1.005 @ 20ºC
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	: Not classified : Not classified : Not classified	
2,2-dimethyl-1,3-dioxolan-4-ylmethanol	(100-79-8)	
LD50 oral rat	7000 mg/kg bodyweight Animal: rat	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: other:	
Skin corrosion/irritation	: Not classified pH: 6 – 8	
Serious eye damage/irritation	: Not classified pH: 6 – 8	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	

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2,2-dimethyl-1,3-dioxolan-4-ylmethanol	(100-79-8)
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Aspiration hazard	: Not classified
11.2. Information on other hazards	

No additional information available

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general : Hazardous to the aquatic environment, short-term : (acute) Hazardous to the aquatic environment, long-term : (chronic) 2,2-dimethyl-1,3-dioxolan-4-ylmethanol (100-7	Not classified
LC50 - Fish [1]	16.7 g/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	> 96 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	4.6 g/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 92 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

BioHygiene Odour Stopper & Stain Spotter		
Persistence and degradability	Readily biodegradable.	
2,2-dimethyl-1,3-dioxolan-4-ylmethanol (100-79-8)		
Persistence and degradability	Rapidly degradable	
12.3. Bioaccumulative potential		
BioHygiene Odour Stopper & Stain Spotter		
Bioaccumulative potential	The product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.	
12.4. Mobility in soil		
BioHygiene Odour Stopper & Stain Spotter		
Additional information	Soluble in water	
12.5. Results of PBT and vPvB assessment		
BioHygiene Odour Stopper & Stain Spotter		
This mixture is not considered to be persistent, bioaccumulating and toxic (PBT)		
This mixture is not considered to be persistent, bioaccumulating and toxic (PVB)		

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12.6. Endocrine disrupting properties		
No additional information available		
12.7. Other adverse effects		
No additional information available		

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID	number		1	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shippir	ng name	·	·	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard	class(es)		· · · · · · · · ·	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group	1		•	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental ha	zards	· · · · ·		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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

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SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

UK HSE EH40 workplace exposure limits Regulation (EC) 1907/2006 - REACH (UK amended)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard

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Abbreviations and acr	onyms:
IARC	International Agency for Research on Cancer
ΙΑΤΑ	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H319	Causes serious eye irritation.

The classification complies with

: ATP 12

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.