

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: 07/07/2022 Revision date: 03/01/2025 Supersedes version of: 14/06/2024 Version: 1.02

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

1.1. Product identifier

Product name : BioHygiene Urinal & Toilet (Water Soluble Paper Sachets)
Product code : BH2283 & BH289

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

Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Biological product for cleaning and deodorising toilets and urinals.

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
info@biohygiene.co.uk

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]

Serious eye damage/eye irritation, Category 2 H319

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

Adverse physicochemical, human health and environmental effects

Causes serious eye irritation.

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H319 - Causes serious eye irritation.

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Precautionary statements (CLP) : P264 - Wash hands thoroughly after handling.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium Carbonate	CAS-No.: 497-19-8 EC-No.: 207-838-8 REACH-no: 01-2119485498-19-XXXX	$\geq 20 - < 40$	Eye Irrit. 2, H319
Citric acid	CAS-No.: 5949-29-1 EC-No.: 201-069-1 EC Index-No.: 607-750-00-3 REACH-no: 01-2119457026-42-XXXX	$\geq 10 - < 20$	Eye Irrit. 2, H319 STOT SE 3, H335
Sulfuric acid, mono-C12-18-alkylesters, sodium salts	CAS-No.: 68955-19-1 EC-No.: 273-257-1 REACH-no: 01-2119490225-39-XXXXX	$\geq 1 - < 5$	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412

Specific concentration limits:

Name	Product identifier	Specific concentration limits (%)
Sulfuric acid, mono-C12-18-alkylesters, sodium salts	CAS-No.: 68955-19-1 EC-No.: 273-257-1 REACH-no: 01-2119490225-39-XXXXX	($10 \leq C < 20$) Eye Irrit. 2; H319 ($20 \leq C < 100$) Eye Dam. 1; H318

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 : If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation : To our knowledge, the product does not present any particular risk, under normal conditions of use. If the person feels unwell : Move to fresh air.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : Causes serious eye irritation.
Symptoms/effects after inhalation : May cause slight irritation.
Symptoms/effects after skin contact : May cause slight irritation to the skin.
Symptoms/effects after eye contact : May cause eye irritation.

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Symptoms/effects after ingestion : May cause irritation to the digestive tract.

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 : Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable.
Explosion hazard : Product is not explosive.
Reactivity in case of fire : Product is not explosive.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment : No special requirement. Avoid contact with skin.
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.
Measures in case of dust release : Ventilate area.

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".

6.2. Environmental precautions

Avoid direct discharge into drains.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Wash the spillage site with large amounts of water.
Other information : 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 : Avoid creating or spreading dust.
Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes.
Hygiene measures : Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Does not require any specific or particular technical measures.
Storage conditions : Store in a well-ventilated place. Keep cool.

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7.3. Specific end use(s)

Water soluble sachet for cleaning urinals & toilets.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

BioHygiene Urinal & Toilet (Water Soluble Paper Sachets)	
United Kingdom - Occupational Exposure Limits	
Remark	Contains no substances with occupational work exposure limits.

DNEL and PNEC

Sulfuric acid, mono-C12-18-alkyl esters, sodium salts (68955-19-1)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	4060 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	285 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	24 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	85 mg/m ³
Long-term - systemic effects, dermal	2440 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.098 mg/l
PNEC aqua (marine water)	0.0098 mg/l
PNEC aqua (intermittent, freshwater)	0.013 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3.45 mg/kg dwt
PNEC sediment (marine water)	0.345 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.631 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	6.8 mg/l
Citric acid (5949-29-1)	
PNEC (Water)	
PNEC aqua (freshwater)	0.44 mg/l
PNEC aqua (marine water)	0.044 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	34.6 mg/kg dwt
PNEC sediment (marine water)	3.46 mg/kg dwt
PNEC (Soil)	
PNEC soil	33.1 mg/kg dwt

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Citric acid (5949-29-1)

PNEC (STP)

PNEC sewage treatment plant	1000 mg/l
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8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Eye protection not applicable. Avoid contact with eyes

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

Type	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

Respiratory protection

Respiratory protection:

Not necessary with sufficient ventilation

Thermal hazards

Thermal hazard protection:

Not required.

Environmental exposure controls

Environmental exposure controls:

Avoid unnecessary release to the environment.

Consumer exposure controls:

Avoid dust formation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Blue.
Appearance	: Fine Powder.
Odour	: Pleasant.
Odour threshold	: Not available
Melting point	: Not available

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Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: 8 1% diluted in water
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.05 – 1.1 @ 20°C
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

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

Sulfuric acid, mono-C12-18-alkyl esters, sodium salts (68955-19-1)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.1 (Acute Toxicity (Oral))
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

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Citric acid (5949-29-1)	
LD50 oral	5400 mg/kg bodyweight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:, 95% CL: 4500 - 6400
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Sodium Carbonate (497-19-8)	
LD50 oral rat	2800 mg/kg bodyweight Animal: rat
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:

Skin corrosion/irritation : Not classified
pH: 8 1% diluted in water

Sodium Carbonate (497-19-8)	
pH	≈ 11.6 Concentration: (≈)0,1 other:

Serious eye damage/irritation : Causes serious eye irritation.
pH: 8 1% diluted in water

Sodium Carbonate (497-19-8)	
pH	≈ 11.6 Concentration: (≈)0,1 other:

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified

Citric acid (5949-29-1)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Citric acid (5949-29-1)	
LOAEL (oral, rat, 90 days)	8000 mg/kg bodyweight Animal: rat
NOAEL (oral, rat, 90 days)	4000 mg/kg bodyweight Animal: rat

Aspiration hazard : Not classified

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Viscosity, kinematic	Not applicable

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No known adverse effects on the functioning of water treatment plants under normal use conditions as recommended.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Sulfuric acid, mono-C12-18-alkyl esters, sodium salts (68955-19-1)	
LC50 - Fish [1]	1.3 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	2.8 mg/l Test organisms (species): Daphnia magna

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Sulfuric acid, mono-C12-18-alkyl esters, sodium salts (68955-19-1)	
EC50 72h - Algae [1]	20 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	14 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

Sodium Carbonate (497-19-8)	
LC50 - Fish [1]	300 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	200 – 227 mg/l Test organisms (species): Ceriodaphnia sp.
EC50 - Crustacea [2]	200 – 227 mg/l Test organisms (species): Ceriodaphnia sp.

12.2. Persistence and degradability

BioHygiene Urinal & Toilet (Water Soluble Paper Sachets)	
Persistence and degradability	Rapidly degradable
Sulfuric acid, mono-C12-18-alkyl esters, sodium salts (68955-19-1)	
Persistence and degradability	Not rapidly degradable
Citric acid (5949-29-1)	
Persistence and degradability	Readily biodegradable.
Sodium Carbonate (497-19-8)	
Persistence and degradability	The product is inorganic so can not be biodegradable, however it is expected to degrade or disassociate.

12.3. Bioaccumulative potential

Citric acid (5949-29-1)	
Bioaccumulative potential	Not potentially bioaccumulable.
Sodium Carbonate (497-19-8)	
Bioaccumulative potential	Not potentially bioaccumulable.

12.4. Mobility in soil

BioHygiene Urinal & Toilet (Water Soluble Paper Sachets)	
Additional information	Soluble in water

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

Other adverse effects : No adverse affects known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

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SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping 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				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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

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)

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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) 648/2004 - Detergents regulation (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
IARC	International Agency for Research on Cancer
IATA	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

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Abbreviations and acronyms:	
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:	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

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.