

SAFETY DATA SHEET



Version: 2.1 Date: 16 April 2026


according to the REACH Regulation (EC) 1907/2006 as amended by Regulation UK SI 2019/758 and UK SI 2020/1577

SLUDGEZAP

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier		
Product name	SLUDGEZAP	
Product Code	-	
Product type	Mixture	
1.2 Relevant identified uses of the substance or mixture and uses advised against		
Identified Use(s)	Treatment of organic wastes and fats in drains and waste systems	
Uses advised against	Anything other than the above. - Not for oral consumption or direct contact with food and beverages	
1.3 Details of the supplier of the safety data sheet		
Company Identification	Thrive Sciences Ltd Unit 3, Northgate Business Park White Lund Industrial Estate Morecambe, Lancashire, LA3 3BJ	
Telephone	+44 (0) 1524 481513	
E-mail (competent person)	sales@thrive.eco	
1.4 Emergency telephone number		
Emergency Phone No.	0844 381 4708	Only available during office hours. Monday to Friday 09.00 - 17.00, GMT
Languages spoken	English	

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture		
2.1.1 Classification According to GB-CLP Regulations UK SI 2019/720 as amended	Eye Irrit 2; H319	
2.2 Label elements	Labelling According to GB-CLP Regulations UK SI 2019/720 as amended	
Product name	SLUDGEZAP:	
Hazard Pictogram(s)		
Signal Word(s)	Warning	
Hazard Statement(s)	H319 - Causes serious eye irritation.	
Precautionary Statement(s)	P101: If medical advice is needed, have product container or label at hand. P102: Keep out of reach of children. P264: Wash hands thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection 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.	

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P501: Dispose of contents/container to a licensed facility in accordance with national regulations

Supplemental information

EUH208: Contains Subtilisin, Lipase, Cellulase, Amylase. May produce an allergic reaction.

2.3 Other hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances 6

Not applicable

3.2 Mixtures Substances in preparations / mixtures.

According to Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No./Index No	REACH Registration No.	Hazard classification
Sodium percarbonate	15 - < 25	15630-89-4	239-707-6	Not yet assigned in the supply chain	Oxid. Solid 3; H272 Acute Tox. 4; H302 Eye Dam. 1; H318
Citric Acid	10 - < 20	77-92-9	201-069-1/ 607-750-00-3	Not yet assigned in the supply chain	Eye Irrit. 2; H319 STOT SE 3; H335
Subtilisin	0.1 - < 1%	9014-01-1	232-752-2/ 647-012-00-8	Not yet assigned in the supply chain	STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334
Lipase	0.1 - < 1%	9001-62-1	232-619-9	Not yet assigned in the supply chain	Resp. Sens. 1, H334
Cellulase	0.1 - < 1%	9012-54-8	232-734-4/ 647-002-00-3	Not yet assigned in the supply chain	Resp. Sens. 1, H334
Amylase, Alpha-	0.1 - < 1%	9000-90-2	232-565-6/ 647-015-00-4	Not yet assigned in the supply chain	Resp. Sens. 1, H334
Non-pathogenic bacteria	≤ 0.1	-	-	-	Not classified

Chemical identity of the substance	CAS No.	EC No.	REACH Registration No	SCL Limits
Sodium percarbonate	15630-89-4	239-707-6	Not yet assigned in the supply chain	Eye Irrit. 2; : 7.5 % ≤ C < 25 % Eye Dam. 1; : C > 25 %

For full text of H phrases see section 16.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Self-protection of the first aider

Inhalation

No action should be taken involving personal risk. Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust
IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/attention.

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Skin contact	IF ON SKIN: Gently wash with plenty of soap and water. If irritation develops and persists, get medical attention.
Eye contact	Rlsh eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If symptoms persist, consult a doctor.
Ingestion	IF SWALLOWED: Rinse mouth. Give plenty of water to drink. Do NOT induce vomiting. IF exposed or concerned: Get medical advice/attention.
4.2 Most important symptoms and effects, both acute and delayed	Causes serious eye irritation. May cause respiratory irritation.
4.3 Indication of any immediate medical attention and special treatment needed	Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media	In case of fire: Water spray, foam, dry powder or CO ₂ .
Suitable extinguishing media	Do not use water jet. Direct water jet may spread the fire.
Unsuitable extinguishing media	No specific fire or explosion hazard. Decomposition products may include the following materials: carbon dioxide carbon monoxide
5.2 Special hazards arising from the substance or mixture	Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus.
5.3 Advice for firefighters	Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures	No action should be taken involving personal risk. Provided it is safe to do so, isolate the source of the leak. Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Ensure adequate ventilation. Avoid breathing dust.
6.2 Environmental precautions	Avoid release to environment
6.3 Methods and material for containment and cleaning up	Sweep up spilled substance. Avoid dust generation. Use vacuum equipment for collecting spilt materials, where practicable. Transfer to a container for disposal. Recover the product where possible. Wash the spillage area with water.
6.4 Reference to other sections	See Also Section: 8, 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling	When using do not eat or drink. Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Ensure adequate ventilation. Avoid breathing dust. Wash hands and exposed skin thoroughly after handling. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
7.2 Conditions for safe storage, including any incompatibilities	Keep container closed. Avoid exposure to moisture, thermal decomposition. Do not overheat
Storage temperature	Stable at ambient temperatures. Recommended: <25 °C to prolong storage life.
Incompatible materials	Keep away from acid, bases, reducing agents, organic or combustible material.
7.3 Specific end use(s)	See Section: 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters	
8.1.1 Occupational exposure limits	The UK HSE (EH40) recommends the following limits for dusts: 10 mg/m ³ (8hr TWA) total inhalable dust; 4 mg/m ³ (8hr TWA) total respirable dust.
	Titanium dioxide (13463-67-7) total inhalable: 10 mg.m-3 (8hr TWA)

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	respirable: 4 mg.m-3 (8hr TWA)
8.1.2 Biological limit value	Not established.
8.1.3 PNECs and DNELs	SODIUM PERCARBONATE (CAS: 15630-89-4) DNEL Workers - inhalation; Long term exposure Local effects 5 mg/m ³ Workers - dermal; Long term exposure Local effects 12.8 mg/cm ² Workers - dermal; Short term exposure Local effects 12.8 mg/cm ² Consumer - Dermal route; Long term exposure Local effects 6.4 mg/cm ² Consumer - Dermal route; Short term exposure Local effects 6.4 mg/cm ² PNEC aqua (freshwater) - 0.035 mg/L aqua (marine water) - 0.035 mg/L STP - 16.24 mg/L
8.2 Exposure controls	
8.2.1 Appropriate engineering controls	Guarantee that the eye flushing systems and safety showers are located close to the working place. Provide adequate ventilation, including appropriate local extraction if dusts, fumes or vapours are likely to be evolved.
8.2.2 Individual protection measures, such as personal protective equipment	Keep good industrial hygiene. Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Do not eat, drink or smoke at the work place. Wash hands before breaks and after work.
Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.	
Eye/ face protection	If risk of eye contact cannot be avoided, use eye protection conforming to EN 166.
Skin protection	Hand protection: If prolonged or repeated contact is expected and unavoidable, protective gloves should be worn conforming to EN 374. Suitable materials: PVC, nitrile, rubber, neoprene. Body protection: Work appropriate clothing and footwear.
Respiratory protection	None required under normal conditions of use.
Thermal hazards	Not applicable.
8.2.3 Environmental exposure controls	Not applicable.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
Appearance	Solid white granulated
Odour	Characteristic - Citrus
Odour threshold	Not established
pH	Diluted solution 10%: 7.0 – 9.5
Melting point/freezing point	Not applicable - solid
Initial boiling point and boiling range	Not applicable - solid
Flash point	Not applicable - solid
Evaporation rate	Not applicable - solid

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Flammability (solid, gas)	Not flammable
Upper/lower flammability or explosive limits	Not established
Vapour pressure	Not applicable - solid
Vapour density	Not applicable - solid
Relative density	Not established
Solubility(ies)	Not established
Partition coefficient: n-octanol/water	Not established
Auto-ignition temperature	Not established
Decomposition temperature	Not established
Viscosity	Not applicable - solid
Explosive properties	Not explosive
Oxidising properties	Not classified.

9.2 Other information None Known

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
10.4 Conditions to avoid	Avoid high temperatures or direct sunlight. Avoid contact with Strong mineral acids.
10.5 Incompatible materials	Keep away from acid, bases, reducing agents, organic or combustible material.
10.6 Hazardous decomposition products	May give off noxious and toxic fumes in a fire.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute Toxicity - Ingestion	Mixture: Based upon the available data, the classification criteria are not met. Calculated acute toxicity estimate (ATE) >2,000 mg/kg.
Acute Toxicity - Inhalation	Mixture: Based upon the available data, the classification criteria are not met. Calculated acute toxicity estimate (ATE) > 5 mg/l (Dusts)
Acute Toxicity - Skin contact	Mixture: Based upon the available data, the classification criteria are not met. Calculated acute toxicity estimate (ATE) >2,000 mg/kg.
Skin corrosion/irritation	Mixture: Based upon the available data, the classification criteria are not met.
Serious eye damage/irritation	Mixture: Eye Irrit. 2; H319: Causes serious eye irritation.
Respiratory or skin sensitisation	Mixture: Based upon the available data, the classification criteria are not met.
Germ cell mutagenicity	Mixture: Based upon the available data, the classification criteria are not met.
Carcinogenicity	Mixture: Based upon the available data, the classification criteria are not met.
Reproductive toxicity	Mixture: Based upon the available data, the classification criteria are not met.
STOT - single exposure	Mixture: Based upon the available data, the classification criteria are not met.
STOT - repeated exposure	Mixture: Based upon the available data, the classification criteria are not met.
Aspiration hazard	Mixture: Based upon the available data, the classification criteria are not met.

Toxicological information on ingredients:

SODIUM PERCARBONATE (CAS: 15630-89-4)

Acute toxicity oral (LD₅₀ mg/kg) 1,034.0 mg/kg Species Rat

Acute toxicity dermal (LD₅₀ mg/kg) 2000 mg/kg Rat

CITRIC ACID (CAS 77-92-9)

Acute toxicity oral (LD₅₀ mg/kg) 5400 mg/kg Species Rat

Acute toxicity dermal (LD₅₀ mg/kg) > 2000 mg/kg Rat

SUBTILISIN (9014-01-1)

Acute toxicity oral (LD₅₀ mg/kg) 1800 mg/kg bodyweight Species rat

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LIPASE (9001-62-1)

Acute toxicity oral (LD₅₀ mg/kg) > 2000 mg/kg bodyweight

CELLULASE (9012-54-8)

Acute toxicity oral (LD₅₀ mg/kg) > 2880 mg/kg bodyweight Species rat

11.2 Other information None.

SECTION 12: ECOLOGICAL INFORMATION

- 12.1 Toxicity Mixture: Based upon the available data, the classification criteria are not met.
- Sodium Percarbonate (CAS: 15630-89-4) LC₅₀, (96h) 70.7mg/L, Pimephales promelas (Short-term toxicity to fish)
EC₅₀ (48h) 4.9mg/L, Daphnia pulex, (Short-term toxicity to aquatic invertebrates)
- Citric Acid (CAS: 77-92-9) LC₅₀ (48h) 440 mg/L, Leuciscus idus melanotus, (Short-term toxicity to fish)
EC₅₀, (24h) 1535 mg/l, Daphnia magna, (Short-term toxicity to aquatic invertebrates)
- Subtilisin (9014-01-1) LC₅₀ (48h) 14.6 mg/l, Oncorhynchus mykiss (Short-term toxicity to fish)
EC₅₀, 0.306 mg/l, Daphnia magna (Short-term toxicity to aquatic invertebrates)
- 12.2 Persistence and degradability No data for the mixture as a whole.
- Sodium Percarbonate (CAS: 15630-89-4) Not applicable for inorganic substances.
Citric Acid (CAS: 77-92-9) Readily biodegradable.% Biodegradation (19 days): 100 (OECD301E)
- 12.3 Bioaccumulative potential No data for the mixture as a whole.
- Sodium Percarbonate (CAS: 15630-89-4) Not applicable for inorganic substances.
Citric Acid (CAS: 77-92-9) The substance has low potential for bioaccumulation. Low log Kow: <3
- 12.4 Mobility in soil No data for the mixture as a whole.
- Sodium Percarbonate (CAS: 15630-89-4) No data available
Citric Acid (CAS: 77-92-9) No data available
- 12.5 Results of PBT and vPvB assessment Not classified as PBT or vPvB. None of the substances in this product fulfil the criteria for being regarded as a PBT or vPvB substance.
- 12.6 Other adverse effects None known.

SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1 Waste treatment methods Disposal should be in accordance with local, state or national legislation. Handle contaminated packages in the same way as the substance itself. Non-contaminated packages may be recycled. Uncleaned empties should be disposed of in the same manner as the contents. Recover or recycle if possible.
- 13.2 Additional information HP4; Irritant — skin irritation and eye damage
Waste classification according to Directive 2008/98/EC (Waste Framework Directive)

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SECTION 14: TRANSPORT INFORMATION

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

	ADR/RID	IMDG	IATA/ICAO
14.1 UN number	Not applicable	Not applicable	Not applicable
14.2 UN proper shipping name	Not applicable	Not applicable	Not applicable
14.3 Transport hazard class(es)	Not applicable	Not applicable	Not applicable
14.4 Packing group	Not applicable	Not applicable	Not applicable
14.5 Environmental hazards	Not applicable	Not applicable	Not applicable
14.6 Special precautions for user	Not applicable	Not applicable	Not applicable
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable		
14.8 Additional Information	None		

SECTION 15: REGULATORY INFORMATION

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

15.1.1 EU regulations	Not restricted
Authorisations and/or restrictions on use	Not restricted
GB Regulations	Not restricted
Detergent regulations 2004/648/EC	Labelling; Contains 15 - 30% - oxygen-based bleaching agents, < 5% anionic surfactants, enzymes, perfumes
15.1.2 National regulations	Water hazard class: 1 (Self classification)
Wassergefährdungsklasse (Germany)	
15.2 Chemical Safety Assessment	A chemical safety assessment is not required under REACH.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

Sections indicated with the following have been revised

Previous Issue -

References:

Existing Safety Data Sheets (SDSs).

GB Mandatory Classification list for; Citric Acid (CAS No. 77-92-9), Subtilisin (CAS No. 9014-01-1), Cellulase (CAS No. 9012-54-8), Amylase, Alpha- (CAS No. 9000-90-2).

Existing ECHA registration for Sodium Percarbonate (CAS No. 15630-89-4); Citric Acid (CAS No. 77-92-9, Titanium Dioxide (13463-67-7), Subtilisin (CAS No. 9014-01-1), Lipase (CAS No. 9001-62-1), Cellulase (CAS No. 9012-54-8), Amylase, Alpha- (CAS No. 9000-90-2)

Classification of the substance or mixture according to The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain	Classification Procedure
Ox. Sol. – Not classified	Expert judgement and weight of evidence.
Eye Irrit. 2	Threshold Calculation

Legend

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Chemical Abstracts Service
DNEL	Derived No Effect Level
EC	European Community
ECHA	European Chemicals Agency

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EU	European Union
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
LC50	Lethal concentration at which 50% of the population is killed
LD50	Lethal dose at which 50% of the population is killed
LTEL	Long Term Exposure Limit
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the international railway transport of dangerous goods
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
UN	United Nations
vPvB	very Persistent and very Bioaccumulative

Hazard classification / Classification code:	Hazard Statement(s)
Ox. Sol. 3; Oxidising solid, Category 3	H272: May intensify fire; oxidiser.
Acute Tox. 4; Acute Toxicity, Category 4	H302: Harmful if swallowed.
Skin Irrit. 2; Skin corrosion/irritation, Category 2	H315: Causes skin irritation.
Eye Dam. 1; Eye damage, category 1	H318: Causes serious eye damage.
Eye Irrit. 2; Eye Irritation, Category 2	H319: Causes serious eye irritation.
Resp. Sens. 1; Respiratory sensitisation, Category 1	H334; May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT SE 3; Specific Target Organ Toxicity — Single Exposure, Category 3	H335: May cause respiratory irritation.
Carc. 2 ; Carcinogenicity, Category 2	H351: Suspected of causing cancer.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

Disclaimers

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Annex to the extended Safety Data Sheet (eSDS)

Exposure scenarios for substances in this preparation are not available.