



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Revision date 03/03/2026

Revision Number 2

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

1.1. Product identifier

Product Code(s)	C2170, C2171
Safety data sheet number	05012
Product Name	Astonish All in 1 Dishwasher Tablets
Pure substance/mixture	Mixture
Formula	2170FLACF1

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

Recommended use Automatic dishwashing tabs

Uses advised against

1.3. Details of the supplier of the safety data sheet

Manufacturer

The London Oil Refining Company Ltd
Astonish House
Unit 8 Thornbury Ind. Park.
Woodhall Road
Bradford BD3 7AF, UK
Tel: +44 1274 767440 (8am-4pm Mon-Fri)
www.astonish.co.uk

For further information, please contact

E-mail address info@astonish.co.uk

1.4. Emergency telephone number

Emergency Telephone UK - Emergency Telephone: +44 (0) 1274 767440 (8am-4pm Mon-Fri).

Alternatively in UK: Contact NHS 111 Telephone 111 (24 hours a day, 7days a week):
Website 111.nhs.uk or a doctor

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Serious eye damage/eye irritation	Category 2 - (H319)
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2.2. Label elements



Signal word

Warning

Hazard statements

H319 - Causes serious eye irritation

EUH208 - Contains Amylase, subtilisin. May produce an allergic reaction.

Precautionary statements

P102 - Keep out of reach of children

P103 - Read label before use

P280 - Wear protective gloves and eye/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

P101 - If medical advice is needed, have product container or label at hand

P264 - Wash hands thoroughly after handling

Unknown aquatic toxicity

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	EC No (EU)	UK REACH	Classification	Specific	M-Factor	M-Factor
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		Index No)	registration number	according to GB CLP (SI 2020/1567 as amended)	concentration limit (SCL)		(long-term)
Sodium Sulfate 7757-82-6	25 - <50%	-	-	-	-	-	-
Sodium Carbonate 497-19-8	25 - <50%	(011-005- 00-2) 207-838-8	-	Eye Irrit. 2 (H319)	-	-	-
Trisodium Citrate Dihydrate 6132-04-3	10 - <25%	200-675-3	-	-	-	-	-
Sodium carbonate peroxyhydrate 15630-89-4	5 - <10%	239-707-6	-	Acute Tox. 4 (H302) Ox. Sol. 3 (H272) Eye Dam. 1 (H318)	-	-	-
Disodium disilicate 1344-09-8	5 - <10%	215-687-4	-	Eye Dam. 1 (H318)	-	-	-
Citric Acid Monohydrate 5949-29-1	5 - <10%	201-069-1	-	Eye Irrit. 2 (H319)	-	-	-
Alanine, N,N- bis(carboxymethyl)-, trisodium salt 164462-16-2	5 - <10%	423-270-5	-	Met. Corr. 1 (H290)	-	-	-
Alcohols, C12-14 ethoxylated 68439-50-9	2.5 - <5%	500-213-3	-	Aquatic Chronic 3 (H412) Acute Tox. 4 (H302) Eye Dam. 1 (H318)	-	-	-
1- hydroxyethylidene- 1,1-diphosphonic acid, tetrasodium salt 3794-83-0	1 - <2.5%	223-267-7	-	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315)	-	-	-
subtilisin 9014-01-1	0.025 - <0.25%	(647-012- 00-8) 232-752-2	-	Aquatic Chronic 3 (H412) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Irrit. 2 (H315) STOT SE 3 (H335)	-	-	-
Perfumes -	0.025 - <0.25%	-	-	-	-	-	-
Amylase 9000-92-4	0.025 - <0.25%	(647-016- 00-X) 232-567-7	-	Resp. Sens. 1 (H334)	-	-	-

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

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (UK REACH Article 59)

SECTION 4: First aid measures**4.1. Description of first aid measures**

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

Symptoms	May cause redness and tearing of the eyes. Burning sensation.
Effects of Exposure	See Section 11 for additional Toxicological Information.

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

Note to physicians	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	No information available.
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5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
Other information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific use(s)
Automatic dishwashing tablets.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	United Kingdom
subtilisin 9014-01-1	TWA: 0.00004 mg/m ³ STEL: 0.00012 mg/m ³ Sen+

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
Disodium disilicate 1344-09-8		1.59 mg/kg bw/day [4] [6]	5.61 mg/m ³ [4] [6]
Sodium carbonate peroxyhydrate 15630-89-4		12.8 mg/cm ² [5] [6] 12.8 mg/cm ² [5] [7]	5 mg/m ³ [5] [6]
Alanine, N,N-bis(carboxymethyl)-, trisodium salt 164462-16-2		170 mg/kg bw/day [4] [6] 2000 mg/kg bw/day [4] [7] 2000 mg/cm ² [5] [7]	40 mg/m ³ [4] [6] 40 mg/m ³ [4] [7] 4 mg/m ³ [5] [6] 40 mg/m ³ [5] [7]
Alcohols, C12-14 ethoxylated 68439-50-9		2080 mg/kg bw/day [4] [6]	294 mg/m ³ [4] [6]
1-hydroxyethylidene-1,1-diphosphonic acid, tetrasodium salt 3794-83-0		48 mg/kg bw/day [4] [6]	16.9 mg/m ³ [4] [6] 10 mg/m ³ [5] [6]

Notes

- [4] Systemic health effects.
- [5] Local health effects.
- [6] Long term.
- [7] Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Disodium disilicate 1344-09-8	0.8 mg/kg bw/day [4] [6]		1.38 mg/m ³ [4] [6]
Sodium carbonate peroxyhydrate 15630-89-4		6.4 mg/cm ² [5] [6] 6.4 mg/cm ² [5] [7]	
Alanine, N,N-bis(carboxymethyl)-, trisodium salt 164462-16-2	17 mg/kg bw/day [4] [6] 85 mg/kg bw/day [4] [7]	400 mg/kg bw/day [4] [6] 400 mg/kg bw/day [4] [7] 400 mg/cm ² [5] [7]	20 mg/m ³ [4] [6] 20 mg/m ³ [4] [7] 2 mg/m ³ [5] [6] 20 mg/m ³ [5] [7]
Alcohols, C12-14 ethoxylated 68439-50-9	25 mg/kg bw/day [4] [6]		87 mg/m ³ [4] [6]
1-hydroxyethylidene-1,1-diphosphonic acid, tetrasodium salt 3794-83-0	2.4 mg/kg bw/day [4] [6]		4.2 mg/m ³ [4] [6] 10 mg/m ³ [5] [6]
subtilisin 9014-01-1	1.8 mg/kg bw/day [4] [6] 3.6 mg/kg bw/day [4] [7]		

Notes

- [4] Systemic health effects.
- [5] Local health effects.
- [6] Long term.
- [7] Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
Disodium disilicate	7.5 mg/L	7.5 mg/L	1 mg/L		

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
1344-09-8					
Sodium carbonate peroxyhydrate 15630-89-4	0.035 mg/L	0.035 mg/L	0.035 mg/L		
Alcohols, C12-14 ethoxylated 68439-50-9	0.0745 mg/L	0.004 mg/L	0.0075 mg/L	0.0004 mg/L	
1-hydroxyethylidene-1,1-diphosphonic acid, tetrasodium salt 3794-83-0	0.0963 mg/L		0.00963 mg/L		
subtilisin 9014-01-1	1.7 µg/L	0.9 µg/L	0.17 µg/L		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Disodium disilicate 1344-09-8			348 mg/L		
Sodium carbonate peroxyhydrate 15630-89-4			16.24 mg/L		
Alanine, N,N-bis(carboxymethyl)-, trisodium salt 164462-16-2				2.5 mg/kg soil dw	
Alcohols, C12-14 ethoxylated 68439-50-9	66.67 mg/kg sediment dw	6.66 mg/kg sediment dw	10 g/L	1 mg/kg soil dw	
1-hydroxyethylidene-1,1-diphosphonic acid, tetrasodium salt 3794-83-0	193 mg/kg sediment dw	19.3 mg/kg sediment dw	58 mg/L	14 mg/kg soil dw	5.3 mg/kg food
subtilisin 9014-01-1			65000 µg/L	568 µg/kg soil dw	

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Rectangular with blue, white and green layers
Color	Blue, white and green layers
Odor	Lemon.
Odor threshold	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	No data available	None known
Flammability	No data available	Does not ignite
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
pH	No data available	pH (diluted solution): 10.5 - 11.2 (1% aqueous)
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Water solubility	No data available	Soluble in water
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapor pressure	No data available	None known
Relative density	No data available	None known
Bulk density	No data available	
Liquid Density	No data available	
Relative vapor density	No data available	None known
Particle characteristics		
Particle Size		
Particle Size Distribution		
Explosive properties	None	
Oxidizing properties	No information available	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation No known effect based on information supplied.

Eye contact Causes serious eye irritation. May cause redness, itching, and pain.

Skin contact May cause sensitization in susceptible persons.

Ingestion No known effect based on information supplied.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes. Irritating.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 3,734.60 mg/kg

ATEmix (dermal) 3,769.90 mg/kg

ATEmix (inhalation-gas) 99,999.00 ppm

ATEmix (inhalation-vapor) 99,999.00 mg/l

ATEmix (inhalation-dust/mist) 99,999.00 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Carbonate	= 4090 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2300 mg/m ³ (Rat) 2 h

Sodium carbonate peroxyhydrate	= 1034 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Disodium disilicate	= 1960 mg/kg (Rat)	-	-
Citric Acid Monohydrate	= 3 g/kg (Rat)	> 2000 mg/kg (Rat)	-
1-hydroxyethylidene-1,1-diphosphonic acid, tetrasodium salt	= 990 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
subtilisin	= 3700 mg/kg (Rat)	-	-
Amylase	> 15 g/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitization May cause sensitization in susceptible persons.

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

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

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

Other adverse effects No other adverse effects expected.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Not considered to be harmful to aquatic life.

Unknown aquatic toxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium Carbonate	-	LC50: =300mg/L (96h, Lepomis macrochirus) LC50: 310 - 1220mg/L (96h, Pimephales promelas)	-	EC50: =265mg/L (48h, Daphnia magna)
Trisodium Citrate Dihydrate	-	LC50: 18000 - 32000mg/L (96h, Poecilia reticulata)	-	EC50: 5600 - 10000mg/L (48h, Daphnia magna)
Sodium carbonate peroxyhydrate	-	LC50: =70.7mg/L (96h, Pimephales promelas)	-	EC50: =4.9mg/L (48h, Daphnia pulex)
Disodium disilicate	-	LC50: 301 - 478mg/L (96h, Lepomis macrochirus) LC50: =3185mg/L (96h, Brachydanio rerio)	-	-
Citric Acid Monohydrate	-	LC50: =1516mg/L (96h, Lepomis macrochirus)	-	-
Alanine, N,N-bis(carboxymethyl)-, trisodium salt	-	LC50: >110mg/L (96h, Danio rerio)	-	-

12.2. Persistence and degradability

Persistence and degradability None known.

12.3. Bioaccumulative potential

Bioaccumulation Not likely to bioaccumulate.

Component Information

Chemical name	Partition coefficient
Citric Acid Monohydrate	-1.72
Alanine, N,N-bis(carboxymethyl)-, trisodium salt	-4
1-hydroxyethylidene-1,1-diphosphonic acid, tetrasodium salt	-3
subtilisin	-3.1

12.4. Mobility in soil

Mobility in soil Not determined.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB above the threshold of declaration.

Chemical name	PBT and vPvB assessment
Sodium Carbonate	The substance is not PBT / vPvB
Trisodium Citrate Dihydrate	The substance is not PBT / vPvB
Sodium carbonate peroxyhydrate	The substance is not PBT / vPvB
Disodium disilicate	The substance is not PBT / vPvB PBT assessment does not apply
Citric Acid Monohydrate	The substance is not PBT / vPvB
Alanine, N,N-bis(carboxymethyl)-, trisodium salt	The substance is not PBT / vPvB
Alcohols, C12-14 ethoxylated	The substance is not PBT / vPvB

1-hydroxyethylidene-1,1-diphosphonic acid, tetrasodium salt	The substance is not PBT / vPvB
subtilisin	The substance is not PBT / vPvB

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	Not regulated

RID

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	

Special Provisions

None

SECTION 15: Regulatory information

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

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (UK REACH - Annex XIV). This product does not contain substances subject to restriction (UK REACH - Annex XVII).

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDSL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

TSCA	- United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL	- Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS	- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS	- Japan Existing and New Chemical Substances
IECSC	- China Inventory of Existing Chemical Substances
KECL	- Korean Existing and Evaluated Chemical Substances
PICCS	- Philippines Inventory of Chemicals and Chemical Substances
AIIC	- Australian Inventory of Industrial Chemicals
NZIoC	- New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report

A Chemical Safety Assessment has not been carried out for this mixture

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

- H272 - May intensify fire; oxidizer
- H302 - Harmful if swallowed
- H315 - Causes skin irritation
- H318 - Causes serious eye damage
- H319 - Causes serious eye irritation
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H335 - May cause respiratory irritation
- H412 - Harmful to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	On basis of test data
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

- Agency for Toxic Substances and Disease Registry (ATSDR)
- U.S. Environmental Protection Agency ChemView Database
- European Food Safety Authority (EFSA)
- European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
- European Chemicals Agency (ECHA) (ECHA_API)
- EPA (Environmental Protection Agency)
- Acute Exposure Guideline Level(s) (AELG(s))
- U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
- U.S. Environmental Protection Agency High Production Volume Chemicals
- Food Research Journal
- Hazardous Substance Database
- International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 03/03/2026

**This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
 Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

UK SDS version information - XGHS

UL release:
 GHS Revision 7
 2022 Q1

United Kingdom

Partial process, including GHS Wizard, NO TW

Full text of H-Statements referred to under section 3 H272 - May intensify fire; oxidizer H302 - Harmful if swallowed H315 - Causes skin irritation H318 - Causes serious eye damage H319 - Causes serious eye irritation H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled H335 - May cause respiratory irritation H412 - Harmful to aquatic life with long lasting effects

Chemical name	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)
Sodium Carbonate	Eye Irrit. 2 (H319)	
Sodium carbonate peroxyhydrate	Acute Tox. 4 (H302) Ox. Sol. 3 (H272) Eye Dam. 1 (H318)	
Disodium disilicate	Eye Dam. 1 (H318)	
Citric Acid Monohydrate	Eye Irrit. 2 (H319)	
Alanine, N,N-bis(carboxymethyl)-, trisodium salt	Met. Corr. 1 (H290)	
Alcohols, C12-14 ethoxylated	Aquatic Chronic 3 (H412) Acute Tox. 4 (H302) Eye Dam. 1 (H318)	
1-hydroxyethylidene-1,1-diphosphonic acid, tetrasodium salt	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315)	
subtilisin	Aquatic Chronic 3 (H412) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Irrit. 2 (H315) STOT SE 3 (H335)	
Amylase	Resp. Sens. 1 (H334)	

