

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

1.1. Product identifier

Product name: MURPHY AND SON SUPER ALPHA AMYLASE

Product code: MS_AA

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

1.3. Details of the supplier of the safety data sheet

Company name: Murphy & Son Ltd
Murphy & Son Ltd
Alpine St, Old Basford
Nottingham
NG6 0HQ
United Kingdom

Tel: (+44) 115 978 5494

Email: technical@murphyandson.co.uk

1.4. Emergency telephone number

Emergency tel: (+44) 115 978 5494
(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Resp. Sens. 1: H334

Most important adverse effects: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2. Label elements

Label elements under CLP:

Hazard statements: H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Hazard pictograms: GHS08: Health hazard



Signal words: Danger

Precautionary statements: P261: Avoid breathing dust/fumes/gas/mist/vapours/spray.

P285: In case of inadequate ventilation wear respiratory protection.

P304+341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

P501: Dispose of contents/container to hazardous or special waste collection point.

SAFETY DATA SHEET

MURPHY AND SON SUPER ALPHA AMYLASE

Page: 2

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Non-classified ingredients:

GLUCOAMYLASE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
-	9032080	-	-	1-10%

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. Remove all contaminated clothes and footwear immediately unless stuck to skin. Obtain medical attention if ill effect or irritation develops

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. Obtain medical attention if pain, blinking, tears or redness persist.

Ingestion: Wash out mouth with water. Call a poison center or doctor/physician if you feel unwell.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention if breathing difficulty and / or other complaints appear

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

Skin contact: No symptoms.

Eye contact: No symptoms.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

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

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers. Alcohol resistant foam. Dry chemical powder. Water spray.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

[cont...]

SAFETY DATA SHEET

MURPHY AND SON SUPER ALPHA AMYLASE

Page: 3

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid. Mark out the contaminated area with signs and prevent access to unauthorised personnel.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air. Do not breathe dust or fumes. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: The floor of the storage room must be impermeable to prevent the escape of liquids.

Respiratory protection: If dust concentration is above occupational exposure limits then a respiratory filter / face

[cont...]

SAFETY DATA SHEET

MURPHY AND SON SUPER ALPHA AMYLASE

Page: 4

mask to EN 149:2001 FFP1 minimum should be worn. Particle filter class P3SL (EN143).

Hand protection: Protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it. Nitrile gloves. Rubber gloves. Butyl gloves. PVC gloves.

Eye protection: Safety glasses.

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Brown

Odour: Slight fermentation odour

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: Soluble

Viscosity: No data available.

Boiling point/range°C: No data available.

Flammability limits %: lower: No data available.

Flash point°C: No data available.

Autoflammability°C: No data available.

Relative density: No data available.

VOC g/l: No data available.

Melting point/range°C: No data available.

upper: No data available.

Part.coeff. n-octanol/water: No data available.

Vapour pressure: No data available.

pH: 4-4.5

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

[cont...]

SAFETY DATA SHEET

MURPHY AND SON SUPER ALPHA AMYLASE

Page: 5

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	>2000	mg/kg

Relevant hazards for substance:

Hazard	Route	Basis
Respiratory/skin sensitisation	INH	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: No symptoms.

Eye contact: No symptoms.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
ALGAE	72H ErC50	>20	mg/l
Fathead Mnnows	96H LC50	>20	mg/l
Daphnia magna	48H EC50	>20	mg/l

12.2. Persistence and degradability

Persistence and degradability: Not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

[cont...]

SAFETY DATA SHEET
MURPHY AND SON SUPER ALPHA AMYLASE

Page: 6

12.6. Other adverse effects

Other adverse effects: Not applicable.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

15.2. Chemical Safety Assessment

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Legend to abbreviations: PNEC = predicted no effect concentration

DNEL = derived no effect level

LD50 = median lethal dose

LC50 = median lethal concentration

LDLO = lethal dose low

EC50 = median effective concentration

IC50 = median inhibitory concentration

dw = dry weight

bw = body weight

cc = closed cup

oc = open cup

MUS = mouse

GPG = guinea pig

RBT = rabbit

HAM = hamster

[cont...]

SAFETY DATA SHEET

MURPHY AND SON SUPER ALPHA AMYLASE

Page: 7

HMN = human

MAM = mammal

PGN = pigeon

IVN = intravenous

SCU = subcutaneous

SKN = skin

DRM = dermal

OCC = ocular/corneal

OPT = optical

INH = inhalation

PCP = physico-chemical properties

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.