

Section 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier****Product name:** BIOKLEER B2**Product code:** BKB2**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of substance / mixture:** Beverage Processing Aids and Other Usages**1.3. Details of the supplier of the safety data sheet****Company name:** Murphy and 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:** This product has no classification under CLP.**2.2. Label elements****Label elements:** This product has no label elements.**2.3. Other hazards****PBT:** This product is not identified as a PBT/vPvB substance.**Section 3: Composition/information on ingredients****3.2. Mixtures**

SAFETY DATA SHEET

BIOKLEER B2

Page: 2

Non-classified ingredients:

CHITOSAN FLAKE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
-	9012-76-4	-	-	1-10%

CITRIC ACID ANHYDROUS POWDER

201-069-1	77-92-9	-	-	1-10%
-----------	---------	---	---	-------

SODIUM METABISULPHITE - REACH registered number(s): 01-2119531326-45-XXXX

231-673-0	7681-57-4	-	Acute Tox. 4: H302; Eye Dam. 1: H318; -: EUH031	<1%
-----------	-----------	---	--	-----

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water.

Eye contact: Bathe the eye with running water for 15 minutes.

Ingestion: Wash out mouth with water.

Inhalation: Consult a doctor.

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

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

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.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

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

[cont...]

SAFETY DATA SHEET

BIOKLEER B2

Page: 3

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.

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 exhaust ventilation of the area.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Non-classified ingredients:

SODIUM METABISULPHITE

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	5 mg/m ³	-	4 mg/m ³	-

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is exhaust ventilation of the area.

Respiratory protection: Respiratory protection not required.

Hand protection: Protective gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

[cont...]

SAFETY DATA SHEET

BIOKLEER B2

Page: 4

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Beige

Odour: Characteristic odour

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: Miscible in all proportions

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: mildly acidic

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.

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

[cont...]

SAFETY DATA SHEET

BIOKLEER B2

Page: 5

Non-classified ingredients:

CITRIC ACID ANHYDROUS POWDER

ORL	MUS	LD50	5040	mg/kg
ORL	RAT	LD50	3	gm/kg
SCU	RAT	LD50	5500	mg/kg

SODIUM METABISULPHITE

IVN	RAT	LD50	115	mg/kg
ORL	RAT	LD50	1131	mg/kg
SKN	RAT	LD50	>2	gm/kg

Toxicity values: No data available.

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

SODIUM METABISULPHITE

ALGAE	72H ErC50	43.8	mg/l
Daphnia magna	48H EC50	89	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	50 - 200	mg/l

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

[cont...]

SAFETY DATA SHEET

BIOKLEER B2

Page: 6

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Dispose in a safe manner in accordance with local/national regulations.

Disposal of packaging: Dispose of as normal industrial waste.

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: Contains food allergen(s), subject to the labelling requirements of (EU) No. 1169/2011
Specified label: "Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre expressed as SO₂". Specified label: "Crustaceans and products thereof".

15.2. Chemical Safety Assessment

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

Section 16: Other information

Other information

Other information: according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

Phrases used in s.2 and s.3: EUH031: Contact with acids liberates toxic gas.

H302: Harmful if swallowed.

H318: Causes serious eye damage.

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

[cont...]

SAFETY DATA SHEET

BIOKLEER B2

Page: 7

GPG = guinea pig

RBT = rabbit

HAM = hamster

HMN = human

MAM = mammal

PGN = pigeon

IVN = intravenous

IPR = intraperitoneal

SCU = subcutaneous

ORL = oral

SKN = skin

DRM = dermal

OCC = ocular/corneal

OPT = optical

ING = ingestion

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.