

SECTION 1. Identification of the substance/mixture and of the company/enterprise

1.1. Product identifier

Product name : ANTIOXIN SB
Product code: refer to sales department

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

Additive preparation for brewery use.

Sectors of use:

Manufacture of food products[SU4]

Product category:

Additive for brewery use

Not recommended uses

Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

AEB BRITAIN LTD - 5a Connaught Avenue, London, England, SW14 7RH -

Tel: +442081332049

infoecommerce@aeb-group.com - www.aeb-group.com

1.4. Emergency telephone number

Emergency telephone number: 111

AEB BRITAIN LTD

Tel: +442081332049

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation GB CLP:

Pictograms:
GHS05

Hazard Class and Category Code(s):
Eye Dam. 1

Hazard statement Code(s):
H318 - Causes serious eye damage.

If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

2.2. Label elements

Labelling according to Regulation GB CLP:

Pictogram, Signal Word Code(s):

GHS05 - Danger

Hazard statement Code(s):

H318 - Causes serious eye damage.

EUH031 - Contact with acids liberates toxic gas (SO₂)

Supplemental Hazard statement Code(s):

Precautionary statements:

Prevention

P280 - Wear eye/face protection.

Response

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or a doctor.



Contains:

Potassium metabisulfite

Ingredients: potassium metabisulfite(*sulphites*) 50% , L-ascorbic acid 50%.

For food, for brewing. Not intended for the final consumer. In accordance with current regulations on the specific matter. Only for industrial use.

2.3. Other hazards

The substance / mixture does NOT contain substances PBT/vPvB according to Regulation No. 1907/2006 (Reach) as amended, Annex XIII

SECTION 3. Composition/information on ingredients

3.1 Substances

Not relevant.

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH / UK REACH
Potassium metabisulfite	> 25 < = 50%	EUH031; Eye Dam. 1, H318		16731-55-8	240-795-3	**

** Not applicable - Regulation No. 1907/2006 (Reach) as amended, Article 2(5).

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:

Ventilate the contaminated area and immediately remove the patient to a well-ventilated area. Keep the patient rested and seek medical advice if unwell.

Direct contact with skin (of the pure product):

Wash thoroughly with soap and running water.

Direct contact with eyes (of the pure product):

Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately

Do not use eye drops or ointments of any kind before the examination or advice from an ophthalmologist.

Ingestion:

Not Hazardous. Seek medical advice if feeling unwell.

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

Contact with eyes may cause intense irritation, including redness and tearing.

In case of inhalation may cause irritation to the respiratory tract.

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

Immediately call a POISON CENTER or a doctor if you feel unwell.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suggested extinguishing media:

Water spray, CO₂, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing media to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

PPE: Use breathing apparatus (self-contained in confined spaces) appropriate head protection and protective clothing. Keep product containers cool with water spray.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation.

Evacuate the danger zone and consult an expert.

6.2. Environmental precautions

Contain spills

Inform the competent authorities.

Dispose of the waste material in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 Containment:

Rapidly recover the product, wear a mask and protective clothing (for specifications refer to section 8.2. SDS)

Recover the product for reuse, if possible, or for elimination.

6.3.2 Cleaning up:

After wiping up, wash with water the area and materials involved

6.3.3 Other information:
None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Wear eye and face protection
Handle the product after consulting all other sections of this Safety Data Sheet.
Do not eat or drink while handling'.
(See paragraph 8 below for substance specific information)

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabelled containers. Keep containers upright and safe by avoiding the possibility of falls or collisions. Store in a cool and dry place, away from heat sources and direct exposure to sunlight.

7.3. Specific end use(s)

Manufacture of food products:
Handle with care.
Store in a clean, dry, ventilated area away from heat and direct sunlight.
Keep container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:
Potassium metabisulfite:
ACGIH - STEL: 0.25 ppm - Notes: (SO₂) UE - TWA: 0.5 ppm - STEL: 1 ppm - Notes: (SO₂)

Sulphur dioxide:
Derived no-effect level (DNEL) = 2.7mg/m³, 1ppm
*8-hour time weighted average (TWA) exposure limits ppm/m³= Parts per million per cubic meter
*8 hours= 0.5ppm
Short term exposure level (STEL) reference period 15 mins)= 1ppm

- Substance: Potassium metabisulfite CAS: 16731-55-8

Derived no-effect level (DNEL)
- Systemic effects: Long term occupational inhalation= 263 (mg/m³).
- Local effects: Long term exposure oral = 10mg per kg body weight per day ADI.
- Local effects: Long term exposure inhalation = 78mg/m³

Predicted no-effect concentration (PNEC)
- Fresh Water = 1.17 (mg/L)
- Marine Water= 0.12 (mg/L)
- Microorganisms in sewage treatment = 88.1 (mg/L)

8.2. Exposure controls



Appropriate engineering controls:

Manufacture of food products:

No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

8.2.2 Individual protection measures:

(a) Eye / face protection

When handling the pure product use safety glasses (EN 166).

(b) Skin protection

(i) Hand protection

Not needed for normal use, unless otherwise provided by the employer and / or by assessments of environmental hygiene investigations

(ii) Other

Wear normal work clothing.

(c) Respiratory protection

Not needed for normal use, unless otherwise provided by the employer and / or by assessments of environmental hygiene investigations

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Use according to good practice and avoid release into the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Fine white powder	
Odour	of sulfur dioxide	
Odour threshold	not determined as considered not relevant for the characterization of the product	
pH	not determined as considered not relevant for the characterization of the product	
Melting point/freezing point	not determined as considered not relevant for the characterization of the product	
Initial boiling point and boiling range	not determined as considered not relevant for the characterization of the product	
Flash point	not determined as considered not relevant for the characterization of the product	ASTM D92
Evaporation rate	not determined as considered not relevant for the characterization of the product	
Flammability (solid, gas)	not determined as considered not relevant for the characterization of the product	

Physical and chemical properties	Value	Determination method
Upper/lower flammability or explosive limits	not determined as considered not relevant for the characterization of the product	
Vapour pressure	not determined as considered not relevant for the characterization of the product	
Vapour density	not determined as considered not relevant for the characterization of the product	
Relative density	0,95 ± 0,15 (20°C)	
Solubility	in water	
Water solubility	soluble in all proportions	
Partition coefficient: n-octanol/water	not determined as considered not relevant for the characterization of the product	
Auto-ignition temperature	not determined as considered not relevant for the characterization of the product	
Decomposition temperature	not determined as considered not relevant for the characterization of the product	
Viscosity	not determined as considered not relevant for the characterization of the product	
Explosive properties	not determined as considered not relevant for the characterization of the product	
Oxidising properties	not determined as considered not relevant for the characterization of the product	

9.2. Other information

No data available.

SECTION 10. Stability and reactivity

10.1. Reactivity

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

None to report

10.5. Incompatible materials

Acids, oxidizers, NaNO₂, NaNO₃

10.6. Hazardous decomposition products

Sulfur dioxide

SECTION 11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

(a) acute toxicity: Potassium metabisulfite: Ingestion-rat LD50 (mg/kg/bw 24h): > 2000

Skin contact-LC50 rat/coniglio (mg/kg/bw 24h): > 2000

Inhalation-rat LD50 (mg/l/4h): > 5.5

(b) skin corrosion/irritation: Potassium metabisulfite: Non-corrosive

Potassium metabisulfite: Non-irritating

(c) serious eye damage/irritation: If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

Potassium metabisulfite: Corrosive

Potassium metabisulfite: Irritating

(d) respiratory or skin sensitisation: Potassium metabisulfite: non-sensitizing

(e) germ cell mutagenicity: Potassium metabisulfite: non-mutagenic

(f) carcinogenicity: Potassium metabisulfite: non-carcinogenic

(g) reproductive toxicity: Potassium metabisulfite: non-toxic for reproduction

(h) specific target organ toxicity (STOT) single exposure: Potassium metabisulfite: not available

(i) specific target organ toxicity (STOT) repeated exposure: Potassium metabisulfite: not available

(j) aspiration hazard: Potassium metabisulfite: not available

11.2. Information on other hazards

No data available.

SECTION 12. Ecological information

12.1. Toxicity

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Related to contained substances:
Potassium metabisulfite:
Acute toxicity-fish LC50 (mg/l/83d): 464-1000
Acute toxicity-crustacea EC50 (mg/l/48 h): 89
Acute algae toxicity ErC50 (mg/l/72-69): 43.8

May cause a reduction of the oxygen level and an increase of the level of ammonia if poured in water, with negative effects on living organism

12.2. Persistence and degradability

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Soluble in water, Persistence is unlikely, based on current data.

12.3. Bioaccumulative potential

Bioaccumulation is unlikely.
Octanol/water partition coefficient= -4.

12.4. Mobility in soil

Potassium metabisulphite is water soluble and may spread in water systems . Will likely be mobile in the environment due to its water solubility. Highly mobile in soils.'

12.5. Results of PBT and vPvB assessment

No PBT/vPvB ingredient is present

12.6. Other adverse effects

No adverse effects

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Residual waste

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner and in accordance with local/regional/national/international regulations. Do not discharge into drains, surface, ground water, soil or subsoil.

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied.

EU waste code

The Waste code should be followed by the whole supply chain through to authorised waste disposal.

Disposal methods/information

Workers should wear appropriate personal protective equipment(s) such as respirator.
Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Do not allow this material to drain into sewers/water supplies.

SECTION 14. Transport information

14.1. UN number or ID number

Not included in the field of application of regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

14.2. UN proper shipping name

None

14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

None

14.6. Special precautions for user

No data available.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

Transport in bulk is not foreseen

SECTION 15. Regulatory information

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

Restrictions relating to the product or contained substances (All. XVII Reg. Reach as amended): not applicable
Substances in Candidate List (art. 59 Reach as amended): the product does not contain SVHC
Substances subject to authorisation (Ann. XIV Reach as amended): the product does not contain SVHC
Regulation (EC) No 1169/2011, as amended: see 2.2

REGULATION (EU) No 1357/2014 - waste:
HP4 - Irritant — skin irritation and eye damage

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information

16.1. Other information

Description of hazard statements set out in paragraph 3
H318 = Causes serious eye damage.

Classification based on data of all mixture components

Main normative references:
Regulation (EC) 1272/2008 (CLP Regulation) as amended

Regulation (EC) No. 1907/2006, REACH as amended
Regulation (EU) No 1169/2011 of the European Parliament and of the Council as amended
Regulation (EC) No 1332/2008 of the European Parliament and of the Council
Regulation (EC) No 1333/2008 of the European Parliament and of the Council
Regulation (EC) No 1331/2008 of the European Parliament and of the Council
Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, as amended
Regulation (EC) No. 850/2004 On persistent organic pollutants, as amended.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, as amended
Regulation (EC) No. 166/2006 Pollutant Release and Transfer Registry, as amended
Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended
Commission Regulation(EC) No 1881/2006 on contaminants in food
EC 1935/2004 and EU 10/2011 as amended on Food Contact materials
EU regulations Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Procedure used to classify under CLP mixture (Reg . EC 1272/2008): calculation method.

Training required: This document must be submitted to the employer to determine the possible need for appropriate training for workers to ensure protection of human health and the environment.

n.a.: not applicable

n.d.: not available

ADR: Accord européen relative au transport International des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

ATE: Acute Toxicity Estimat

BFC: BioconCentration Factor

BOD: Biochemical Oxigen Demand

CAS: Chemical Abstract Service number

CAP: Centre AntiPoison

CE/EC number EINECS (European Inventory of existing Commercial Substances) e ELINCS (European List of notified Chemical Substances)

CL50/LC50: Lethal Concentration 50

DL50/LD50: Lethal Dose 50

COD: Chemical Oxygen Demand

DNEL: Derived No Effect Level

EC50: half maximal Effective Concentration

ERC: Enviroment Release Classes

EU/UE: European Union

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods code

Kow: Octanol water partition coefficient

NOEC: No Observed Effect Concentration

OEL: Occupational Exposure Limit

PBT: Persistent Bioaccumulative and Toxic

PC: Product Categories

PNEC: Predicted No Effect Concentration

PROC: Process Categories

RID: Règlement concernant le transport International ferroviaire des marchandises dangereuses (Regulations concerning International rail transport of dangerous goods)

STOT: Target Organ Systemic Toxicity

STOT (RE): Repeated Exposure

STOT (SE): Single Exposure

STP: Sewage Treatment Plants

SU: Sector of Use

SVCH: Substance of Very High Concern

TLV: Threshold Limit Value

vPvB: Very Persistent Very Bioaccumulative

References and Sources:

- ECHA Registered Substances:

<https://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>

- GB MCL-GB mandatory clas. and labelling list: <https://www.hse.gov.uk/chemicalclassification/assets/docs/mcl-list.xlsx>

- SDS supplier

- GESTIS International Limit Value: <http://limitvalue.ifa.dguv.de>

- HSE Great Britain limit values: <https://www.hsl.gov.uk/>

This msds was made in good faith by technical Office on the basis of the information available at the date of the last revision. The person in charge must regularly inform the employees about the specific risks they encounter when using this substance/product. The information contained here relate only to the substance/the preparation indicated and may not apply if the product is used improperly or in combination with others. Nothing contained herein shall be construed as a guarantee, either express or implied. It is the responsibility of the user to ensure the opportunities and completeness of the information contained herein for their own particular use.

*** this tab annuls and replaces any previous edition. (IIXX)

Changes to the previous edition: first issue.
