



SAFETY DATA SHEET

Kjeltabs IB48

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

1.1. Product identifier

Product name Kjeltabs IB48

Product number AA24

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

Identified uses Catalyst.

1.3. Details of the supplier of the safety data sheet

Supplier Thompson and Capper
Hardwick Road
Astmoor Industrial Estate
Runcorn
Cheshire
WA7 1PH
T:+44(0)1928 573734
F:+44(0)1928 580694
enquiries@thompsonandcapper.com

1.4. Emergency telephone number

Emergency telephone +44(0)1928 573734 (0800 - 1700)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Eye Dam. 1 - H318

Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements	P273 Avoid release to the environment.
	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.
	P310 Immediately call a POISON CENTER/ doctor.
	P391 Collect spillage.
	P501 Dispose of contents/ container in accordance with national regulations.

Contains	Copper Sulphate Pentahydrate
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2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Potassium sulphate			92%
CAS number: 7778-80-5	EC number: 231-915-5	REACH registration number: 01-2119489441-34	
Classification Not Classified			

Copper Sulphate Pentahydrate			5.5%
CAS number: 7758-99-8	EC number: 231-847-6	REACH registration number: 05-2114719065-53-0000	
M factor (Acute) = 10	M factor (Chronic) = 1		
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

SELENIUM			2.8%
CAS number: 7782-49-2	EC number: 231-957-4	REACH registration number: 05-2114099336-39-000	
Classification Acute Tox. 3 - H301 Acute Tox. 3 - H331 STOT RE 2 - H373 Aquatic Chronic 4 - H413			

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Remove affected person from source of contamination. Remove contaminated clothing. Get medical attention if any discomfort continues. Place unconscious person on the side in the recovery position and ensure breathing can take place.
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Inhalation	Remove affected person from source of contamination. Move affected person to fresh air at once. Get medical attention. If breathing stops, provide artificial respiration.
Ingestion	Get medical attention. Show this Safety Data Sheet to the medical personnel.
Skin contact	Wash skin thoroughly with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with the following media: Dry chemicals, sand, dolomite etc.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	Forms explosive mixtures with air.
Hazardous combustion products	When heated, vapours/gases hazardous to health may be formed.

5.3. Advice for firefighters

Protective actions during firefighting	If risk of water pollution occurs, notify appropriate authorities.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid generation and spreading of dust. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.
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6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Collect and place in suitable waste disposal containers and seal securely.
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6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions Mechanical ventilation or local exhaust ventilation may be required. Avoid generation and spreading of dust.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry and cool place. Do not store near heat sources or expose to high temperatures.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

SELENIUM

Long-term exposure limit (8-hour TWA): WEL 0.1 mg/m³

Short-term exposure limit (15-minute): WEL

WEL = Workplace Exposure Limit.

Ingredient comments No exposure limits known for ingredient(s).

Copper Sulphate Pentahydrate (CAS: 7758-99-8)

Ingredient comments No exposure limits known for ingredient(s).

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of dust. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Dust-resistant, chemical splash goggles.

Hand protection

It is recommended that gloves are made of the following material: Neoprene.

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Wash at the end of each work shift and before eating, smoking and using the toilet. Contaminated clothing should be placed in a closed container for disposal or decontamination.

Respiratory protection

Wear a respirator fitted with the following cartridge: Particulate filter, type P3.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Tablet

Colour Grey.

Odour Odourless.

Solubility(ies) Soluble in water.

9.2. Other information

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Other information Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Strong reducing agents.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not known.

10.4. Conditions to avoid

Conditions to avoid Avoid heat.

10.5. Incompatible materials

Materials to avoid Strong reducing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Not known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 2,564.1

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l) 17.86

Toxicological information on ingredients.

Copper Sulphate Pentahydrate

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.0

SELENIUM

Acute toxicity - oral

ATE oral (mg/kg) 100.0

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l) 0.5

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 1 mg/l, Pimephales promelas (Fat-head Minnow)
LC₅₀, 96 hours: 1 mg/l, Fish

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Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 0.43 mg/l, Daphnia magna EC ₅₀ , 48 hours: 0.43 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: > 100 mg/l, Selenastrum capricornutum IC ₅₀ , 72 hours: 99 mg/l, Algae

Ecological information on ingredients.

Potassium sulphate

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 3550 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 890 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 2900 mg/l, Algae

Copper Sulphate Pentahydrate

Toxicity	Very toxic to aquatic organisms.
<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.01 < L(E)C ₅₀ ≤ 0.1
M factor (Acute)	10
Acute toxicity - fish	LC ₅₀ , : 0.7 mg/l, Lepomis macrochirus (Bluegill) LC ₅₀ , : 0.6 mg/l, Pimephales promelas (Fat-head Minnow) LC ₅₀ , 96 hours: 0.6 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 0.024 mg/l, Daphnia magna
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1

SELENIUM

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 1 mg/l, Pimephales promelas (Fat-head Minnow) LC ₅₀ , 96 hours: 1 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 0.43 mg/l, Daphnia magna EC ₅₀ , 48 hours: 0.43 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: > 100 mg/l, Selenastrum capricornutum IC ₅₀ , 72 hours: 99 mg/l, Algae

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.

Potassium sulphate

Persistence and degradability	There are no data on the degradability of this product.
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Copper Sulphate Pentahydrate

Persistence and degradability

There are no data on the degradability of this product.

SELENIUM

Persistence and degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Ecological information on ingredients.

Potassium sulphate

Bioaccumulative potential No data available on bioaccumulation.

Copper Sulphate Pentahydrate

Bioaccumulative potential No data available on bioaccumulation.

SELENIUM

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

Mobility No data available.

Ecological information on ingredients.

Potassium sulphate

Mobility The product is miscible with water and may spread in water systems.

Copper Sulphate Pentahydrate

Mobility No data available.

SELENIUM

Mobility No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

Potassium sulphate

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Copper Sulphate Pentahydrate

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Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

SELENIUM

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Ecological information on ingredients.

Potassium sulphate

Other adverse effects Not determined.

SELENIUM

Other adverse effects The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3077

UN No. (IMDG) 3077

UN No. (ICAO) 3077

14.2. UN proper shipping name

Proper shipping name (ADR/RID) Environmentally hazardous substance, solid, NOS, (contains Copper Sulphate Pentahydrate)

Proper shipping name (IMDG) Environmentally hazardous substance, solid, NOS, (contains Copper Sulphate Pentahydrate)

Proper shipping name (ICAO) Environmentally hazardous substance, solid, NOS, (contains Copper Sulphate Pentahydrate)

Proper shipping name (ADN) Environmentally hazardous substance, solid, NOS, (contains Copper Sulphate Pentahydrate)

14.3. Transport hazard class(es)

ADR/RID class 9

IMDG class 9

ICAO class/division 9

Transport labels



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14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date	18/11/2022
Revision	11
Hazard statements in full	H301 Toxic if swallowed. H302 Harmful if swallowed. H318 Causes serious eye damage. H331 Toxic if inhaled. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H413 May cause long lasting harmful effects to aquatic life.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.