SAFETY DATA SHEET

according to Regulation (EU) 2015/830

Bio 20

Revision 6

Revision date 2021-08-25

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

1.1. Product identifier

Product name	Bio 20

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

Description	Fertiliser.

1.3. Details of the supplier of the safety data sheet

Company	Omex Agriculture Ltd
Address	Bardney Airfield Tupholme Lincoln LN3 5TP United Kingdom
Web	www.omex.co.uk
Telephone	01526 396000
Fax	01526 396001
Email	enquire@omex.com
Email address of the competent person	Safety@omex.com

1.4. Emergency telephone number

Emergency telephone number	+44 (0) 1553817500

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.2. Classification - EC 1272/2008	Eye Irrit. 2: H319;

2.2. Label elements

Hazard pictograms	
Signal Word	Warning
Hazard Statement	Eye Irrit. 2: H319 - Causes serious eye irritation.
Precautionary Statement: Prevention	P264 - Wash thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: 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. P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

Other hazards	No data is available on this product.

Copyright © 2022 ChemSoft. All rights reserved.

Powered by ChemSoft EH&S

Bio 20

Revision 6
Revision date 2021-08-25

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Potassium Nitrate		7757-79-1	231-818-8	01-2119488224-35 01-2119488224-35 01-2119488224-35	20 - 30%	Ox. Sol. 3: H272;
Ammonium Nitrate		6484-52-2	229-347-8	01-2119490981-27	10 - 20%	Ox. Sol. 3: H272; Eye Irrit. 2: H319;
Magnesium Nitrate Hexahydrate		13446-18-9	233-826-7	01-2119491164-38	1 - 10%	Eye Irrit. 2: H319;
Sodium metabisulphite (Disodium disulphite)	016-063-00-2	7681-57-4	231-673-0	01-2119531326-45	0 - 0.5%	Acute Tox. 4: H302; Eye Dam. 1: H318;

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air.
Eye contact	Rinse immediately with plenty of water for 15 minutes holding the eyelids open.
Skin contact	Wash off immediately with plenty of soap and water. Remove contaminated clothing.
Ingestion	DO NOT INDUCE VOMITING. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person.

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

Inhalation	Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system.
Eye contact	Causes serious eye irritation.
Skin contact	May cause irritation to skin.
Ingestion	May cause irritation to mucous membranes. Ingestion may cause nausea and vomiting.

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

Inhalation	Seek medical attention if irritation or symptoms persist.
Eye contact	Seek medical attention.
Skin contact	Seek medical attention if irritation or symptoms persist.
Ingestion	DO NOT INDUCE VOMITING. Seek medical attention if irritation or symptoms persist.

SECTION 5: Firefighting measures

5.1. Extinguishing media

	Use extinguishing media appropriate to the surrounding fire conditions.

5.2. Special hazards arising from the substance or mixture

	Burning produces irritating, toxic and obnoxious fumes.

5.3. Advice for firefighters

	Wear suitable respiratory equipment when necessary. Cool fire exposed containers with waterspray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Ensure adequate ventilation of the working area. Wear suitable protective equipment.

6.2. Environmental precautions

	Do not allow product to enter drains. Prevent further spillage if safe.

6.3. Methods and material for containment and cleaning up

	Absorb with inert, absorbent material. Sweep up. Transfer to suitable, labelled containers for

Copyright © 2022 ChemSoft. All rights reserved.

Powered by ChemSoft EH&S

Bio 20

6.3. Methods and material for containment and cleaning up

	disposal. Clean spillage area thoroughly with plenty of water.

6.4. Reference to other sections

	See section 2, 8, 13 for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

	Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best Manual Handling considerations when handling, carrying and dispensing.

7.2. Conditions for safe storage, including any incompatibilities

	Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labelled containers.

7.3. Specific end use(s)

	See section 1.2 for further information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

	Occupational exposure controls.

8.1.1. Exposure Limit Values

Copyright © 2022 ChemSoft. All rights reserved.

Powered by ChemSoft EH&S

Bio 20

Revision 6
Revision date 2021-08-25

8.1.1. Exposure Limit Values

Cobalt disodium ethylenediaminetetraacetate (Cobalt EDTA)	WEL 8-hr limit ppm:	WEL 8-hr limit mg/m3: 0.1
	WEL 15 min limit ppm:	WEL 15 min limit mg/m3:
	WEL 8-hr limit mg/m3 total inhalable dust: -	WEL 15 min limit mg/m3 total inhalable dust: -
	WEL 8-hr limit mg/m3 total respirable dust: -	WEL 15 min limit mg/m3 total respirable dust: -
Copper EDTA	WEL 8-hr limit ppm:	WEL 8-hr limit mg/m3:
	WEL 15 min limit ppm:	WEL 15 min limit mg/m3:
	WEL 8-hr limit mg/m3 total inhalable dust: 1	WEL 15 min limit mg/m3 total inhalable dust: 2
	WEL 8-hr limit mg/m3 total respirable dust:	WEL 15 min limit mg/m3 total respirable dust:
Potassium Nitrate	WEL 8-hr limit ppm:	WEL 8-hr limit mg/m3:
	WEL 15 min limit ppm:	WEL 15 min limit mg/m3:
	WEL 8-hr limit mg/m3 total inhalable dust: -	WEL 15 min limit mg/m3 total inhalable dust: -
	WEL 8-hr limit mg/m3 total respirable dust: -	WEL 15 min limit mg/m3 total respirable dust: -
Sodium metabisulphite (Disodium disulphite)	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m3: 5
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: -
	WEL 8-hr limit mg/m3 total inhalable dust: -	WEL 15 min limit mg/m3 total inhalable dust: -
	WEL 8-hr limit mg/m3 total respirable dust: -	WEL 15 min limit mg/m3 total respirable dust: -
Sodium Molybdate	WEL 8-hr limit ppm:	WEL 8-hr limit mg/m3: 5 As Mo
	WEL 15 min limit ppm:	WEL 15 min limit mg/m3:
	WEL 8-hr limit mg/m3 total inhalable dust: -	WEL 15 min limit mg/m3 total inhalable dust: -
	WEL 8-hr limit mg/m3 total respirable dust: -	WEL 15 min limit mg/m3 total respirable dust: -
Zinc disodium ethylenediaminetetraacetate (Zinc EDTA)	WEL 8-hr limit ppm:	WEL 8-hr limit mg/m3: 10
	WEL 15 min limit ppm:	WEL 15 min limit mg/m3: 3
	WEL 8-hr limit mg/m3 total inhalable dust: -	WEL 15 min limit mg/m3 total inhalable dust: -
	WEL 8-hr limit mg/m3 total respirable dust: -	WEL 15 min limit mg/m3 total respirable dust: -

DNEL: Derived no-effect level.

Exposure Pattern - Workers

Copper EDTA	Long-term - inhalation - Systemic effects	1.8 mg/m³
	Long-term - dermal - Systemic effects	3750 mg/kg
Potassium Nitrate	Long-term - inhalation - Systemic effects	36.7 mg/kg
	Long-term - dermal - Systemic effects	20.8 mg/kg

Exposure Pattern - General population

Copyright © 2022 ChemSoft. All rights reserved.

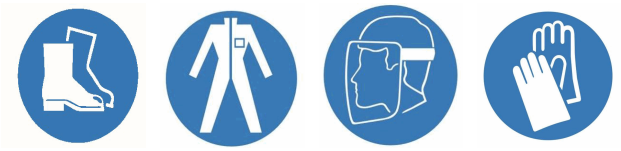
Powered by ChemSoft EH&S

Bio 20

Exposure Pattern - General population

Copper EDTA	Long-term - inhalation - Systemic effects	0.45 mg/m³		
	Long-term - dermal - Systemic effects	1875 mg/kg	Long-term - oral - Systemic effects	0.375 mg/kg
Potassium Nitrate	Long-term - inhalation - Systemic effects	10.9 mg/kg		
	Long-term - dermal - Systemic effects	12.5 mg/kg	Long-term - oral - Systemic effects	12.5 mg/kg

8.2. Exposure controls



8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area.
8.2.2. Individual protection measures	Wear chemical protective clothing.
Eye / face protection	Approved safety goggles.
Skin protection - Handprotection	Chemical resistant gloves (PVC).
Respiratory protection	Wear:. Suitable respiratory equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Green
Odour	Characteristic
Flammability (solid, gas)	Not applicable.
pH	4.5 - 6.5
Odour threshold	Not relevant
Relative density	1.5 - 1.54
Autoignition temperature	Not applicable.
Partition coefficient	Not determined
Explosive properties	Not applicable.
Viscosity	Not determined
Oxidising properties	Not applicable.
Vapour density	Not determined
Evaporation rate	Not determined
Initial boiling point	Not determined
Melting point	Not determined
Vapour pressure	Not determined
Solubility	Soluble in water

9.2. Other information

Copyright © 2022 ChemSoft. All rights reserved.

Powered by ChemSoft EH&S

Bio 20

9.2. Other information

Specific gravity	1.5 - 1.54
Conductivity	Not relevant
VOC (Volatile organic compounds)	Not relevant
Gas group	Not determined
Benzene Content	Not relevant
Surface tension	Not determined
Lead content	Not relevant

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Strong acids and strong bases.

10.4. Conditions to avoid

Avoid sparks, flames, heat and sources of ignition.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Burning produces irritating, toxic and obnoxious fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Irritating to eyes.
Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	No sensitizaton effects reported.
Germ cell mutagenicity	No data is available on this product.
Carcinogenicity	No data is available on this product.
Reproductive toxicity	No data is available on this product.
STOT-single exposure	No data is available on this product.
STOT-repeated exposure	No data is available on this product.
Aspiration hazard	No data is available on this product.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure.

11.1.4. Toxicological Information

Copyright © 2022 ChemSoft. All rights reserved.

Powered by ChemSoft EH&S

Bio 20

Revision 6
Revision date 2021-08-25

11.1.4. Toxicological Information

Ammonium Nitrate	**Dermal Rat LD50:** 2950 mg/kg	**Oral Rat LD50:** 2000 mg/kg
Cobalt disodium ethylenediaminetetraacetate	**Oral Rat LD50:** 6671mg/kg	
Copper EDTA	**Oral Rat LD50:** 1000 mg/kg	
Potassium Nitrate	**Dermal Rat LD50:** >2000 **Inhalation Rat LC50/4 h:** >527 mg/m3	**Oral Rat LD50:** >5000
Sodium metabisulphite	**Dermal Rat LD50:** 2000 mg/kg **Inhalation Rat LC50/4 h:** 5.5 mg/L/4H	**Oral Rat LD50:** 1540 mg/kg
Sodium Molybdate	**Dermal Rat LD50:** 2000mg/kg **Inhalation Rat LC50/4 h:** 3.92mg/L	**Oral Rat LD50:** 2000mg/kg
Zinc disodium ethylenediaminetetraacetate	**Inhalation Rat LC50/4 h:** 2.75	**Oral Rat LD50:** 5000mg/kg

SECTION 12: Ecological information

12.1. Toxicity

Ammonium Nitrate	**Fish LC50/96h:** 100 mg/l	**Algae LC50/96h:** 1700
Copper EDTA	**Fish LC50/96h:** 555.0000 mg/l	**Algae EC50/72h:** 662.6mg/L
Potassium Nitrate	**Daphnia EC50/48h:** 490.0000 mg/l **Fish LC50/96h:** 1378.0000 mg/l	**Algae IC50/72h:** 1700.0000 mg/l
Sodium metabisulphite	**Daphnia EC50/48h:** 89.0000 mg/l	**Fish LC50/96h:** 177.8000 mg/l
Sodium Molybdate	**Fish LC50/96h:** 79.8000 mg/l	

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

No data is available on this product.

Partition coefficient

Bio 20	Not determined	**Potassium Nitrate**	Not applicable.
Ammonium Nitrate	Not applicable.	**Zinc disodium ethylenediaminetetraacetate**	No data available
Copper EDTA	Not applicable.	**Sodium metabisulphite**	No data available
Sodium Molybdate	No data available		

12.4. Mobility in soil

No data is available on this product.

12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6. Other adverse effects

No data is available on this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

This material and its container must be disposed of in a safe way.

General information

Contact a licensed waste disposal company.

Disposal methods

Do not empty into drains; dispose of this material and its container in a safe way.

Copyright © 2022 ChemSoft. All rights reserved.

Powered by ChemSoft EH&S

Bio 20

Revision 6
Revision date 2021-08-25

Disposal of packaging

	Do NOT reuse empty containers. This material and its container must be disposed of in a safe way.

SECTION 14: Transport information

14.1. UN number

	The product is not classified as dangerous for carriage.

14.2. UN proper shipping name

	The product is not classified as dangerous for carriage.

14.3. Transport hazard class(es)

	The product is not classified as dangerous for carriage.

14.4. Packing group

	The product is not classified as dangerous for carriage.

14.5. Environmental hazards

	The product is not classified as dangerous for carriage.

14.6. Special precautions for user

	The product is not classified as dangerous for carriage.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

	The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

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

Regulations	COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

15.2. Chemical safety assessment

	No data is available on this product.

SECTION 16: Other information

Other information

Revision	This document differs from the previous version in the following areas:. 12 - 12.1. Toxicity.
Text of Hazard Statements in Section 3	Ox. Sol. 3: H272 - May intensify fire; oxidiser. Eye Irrit. 2: H319 - Causes serious eye irritation. EUH031 - Contact with acids liberates toxic gas. Acute Tox. 4: H302 - Harmful if swallowed. Eye Dam. 1: H318 - Causes serious eye damage.

Further information

	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. 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 other process.

Copyright © 2022 ChemSoft. All rights reserved.

Powered by ChemSoft EH&S