



SAFETY DATA SHEET

according to Regulation (EU) 2020/878

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Bio 20

Revision 9
Revision date 2023-05-17

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

1.1. Product identifier

Product name	Bio 20
Other means of identification / UFI	N110-U0WX-E00R-MA8A.

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

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [SU1] Agriculture, forestry, fishery; [PC12] Fertilizers;
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
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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2.2. Label elements

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.
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2.3. Other hazards

Other hazards	None known.
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Further information

	This product has been independently tested in accordance with the protocols set out under EU Regulation (EC) 440/2008: A.21 - Oxidising Properties (Liquids) and is not Classified as an Oxidising Liquid (GLP3016012417R1/2022).
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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.
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5.2. Special hazards arising from the substance or mixture

	Burning produces irritating, toxic and obnoxious fumes.
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5.3. Advice for firefighters

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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 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

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8.1.1. Exposure Limit Values

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


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Exposure Pattern - General population

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

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.
Density / Relative Density	1.5 - 1.54
pH	4.5 - 6.5
Autotgnition temperature	Not applicable.
Oxidising properties	Non-Oxidiser (A.21- Oxidising Liquids Pass)
Explosive properties	Not applicable.
Vapour pressure	Not determined
Initial boiling point	Not determined
Melting point	Not determined
Odour threshold	Not relevant
Partition coefficient (P)	Not determined
Viscosity	Not determined
Relative Vapour Density	Not determined
Evaporation rate	Not determined
Freezing Point	Not determined
Fat Solubility	Not determined
Solubility	Soluble in water

9.2. Other information

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9.2. Other information

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

SECTION 10: Stability and reactivity

10.1. Reactivity

	Stable under normal conditions.
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10.2. Chemical stability

	Stable under normal conditions.
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10.3. Possibility of hazardous reactions

	Strong acids and strong bases.
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10.4. Conditions to avoid

	Avoid sparks, flames, heat and sources of ignition.
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10.5. Incompatible materials

	Strong acids. Strong bases.
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10.6. Hazardous decomposition products

	Burning produces irritating, toxic and obnoxious fumes.
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SECTION 11: Toxicological information

11.1 Information on hazard classes

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 sensitization 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

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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

No data available

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

No data is available on this product.

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 Endocrine disrupting properties

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.

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.

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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 Maritime Transport in bulk according to IMO instruments

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). COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning 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.
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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: 1 - Other means of identification / UFI. 1 - Product Use. 2 - Other hazards. 2 - Further information. 12 - 12.1. Toxicity. 15 - Regulations. 16 - Acronyms.
Acronyms	ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk;

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Other information

	<p>IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; N.O.S. -Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS -Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative.</p>
Text of Hazard Statements in Section 3	<p>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.</p>

Further information

	<p>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.</p>
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