MAX

SAFETY DATA SHEET



NEW ZEALAND
18 September 2026
Version 1.1

SAFETY DATA SHEET | HSR002571 | MANUFACTURER ISSUE

01 Identification

Product identifier	**Bio Charge MAX (MAX NPKS)**
Recommended use	Liquid fertiliser with a biological base for pasture, cropping and orchard nutrition programmes. Obtain MAX-specific application advice from Biocharge.
Restrictions on use	Not for human or animal consumption. Prevent entry into drains and waterways. Obtain site-specific rate, dilution and grazing/harvest advice from Biocharge.
Manufacturer	**Biocharge Ltd** 121 Kana Street, Mataura, New Zealand
Contact	021 819 372 | info@biocharge.co.nz biocharge.co.nz
Medical exposure advice	**National Poisons Centre: 0800 764 766 (0800 POISON)** For a life-threatening emergency, call 111.
Pack sizes	200 L drums and 1,000 L IBCs. Check the individual container label.

02 Hazard identification

WARNING. Classified as hazardous under New Zealand GHS. Biocharge has confirmed the revised finished-MAX assessment using the updated supplier information. The oral, eye and terrestrial-vertebrate classifications below are retained; H413 has been removed.

MAX classifications and hazard statements:
Acute Oral Toxicity Category 4 (6.1D): **H302 - Harmful if swallowed.**
Eye Irritation Category 2 (6.4A): **H319 - Causes serious eye irritation.**
Hazardous to terrestrial vertebrates (9.3C): **H433 - Harmful to terrestrial vertebrates.**
Signal word: WARNING. Pictogram: GHS07 (exclamation mark).

Handling: Avoid swallowing, skin/eye contact and spray mist. Wear protective gloves, splash goggles and work clothing. Prevent uncontrolled environmental release. Contains fish-derived material; spills may be slippery and storage pressure may build.

Precautionary statements: P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P273 - Avoid release to the environment. P280 - Wear protective gloves and eye protection. P301+P312 - IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. P330 - Rinse mouth. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes; remove contact lenses if present and easy; continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. P501 - Dispose of contents/container in accordance with local regulations.

Basis: Manufacturer-confirmed classification. H413 previously relied on the superseded Cocoly SDS and is withdrawn following the confirmed assessment. No new finished-product toxicological tests are reported. Update the assessment when relevant ingredient, pH or density data become available.

03 Composition / information on ingredients

Water-based blend of fish hydrolysate, molasses, charged biochar, seaweed extract powder and soluble mineral fertiliser. Cocoly's remaining organic/biostimulant/chelated trace package is supplier-described as non-hazardous; individual amounts are not supplied.

Ammonium sulphate	CAS 7783-20-2. Calculated input contribution: approximately **233.28 g/L (23.328% w/v)**. Finished-product % w/w remains to be established.
Monoammonium phosphate	CAS 7722-76-1. Calculated input contribution: approximately **22.464 g/L (2.2464% w/v)**. Finished-product % w/w remains to be established.
Potassium sulphate	CAS 7778-80-5. Supplier: approximately 10% w/w in Cocoly. Calculated MAX input: **43.2 g/L (4.32% w/v)**. Finished-product % w/w depends on density.
Fish hydrolysate	Fish-derived liquid treated with food-grade sulphuric acid. Residual free-acid concentration is not available.
Molasses	Sugar-rich ingredient. Detailed current supplier safety/composition information is not available in the supplied information.
Charged biochar	Carbonaceous material suspended in liquid. Production-input moisture and particle-size data are not confirmed.
Seaweed extract	Ascophyllum nodosum extract powder. Existing source: Seaweed Treat Extract Crop and Pasture, version 4.0.
Water	Present in the formulation and used to reach the specified final batch volume.

Basis: Calculated at 432 kg Cocoly per 1,000 L finished MAX, using the supplier's approximate salt percentages. These are input calculations, not finished-product laboratory results. w/v is grams per 100 mL; w/w is grams per 100 g.

Nutrient calculation update: Biocharge confirms the Cocoly COA figures are % w/w: N 15, P2O5 3, K2O 5 and S 18. Oxide conversion gives elemental P 1.3092% and K 4.1510%. At the formulation dose, Cocoly contributes N 6.48%, P 0.5655744%, K 1.793232% and S 7.776% w/v to MAX.

Including the existing Boost documented-input estimates gives approximately **N 9.0%, P 0.9%, K 2.6% and S 8.3-8.8% w/v**. These are partial calculations, not finished-product test results or guaranteed ranges. Molasses, water and other unquantified contributions and full batch variation are excluded. The original COA has not been independently inspected.

Nutrient content, pH and liquid density are due for laboratory retesting by **31 October 2026**. Update the composition information when representative results are available.

04 First-aid measures

Eyes	Immediately rinse gently with clean running water for at least 15 minutes. Hold eyelids open; remove contact lenses if easy. Obtain medical assessment. Do not use eye drops.
Skin	Rinse promptly with plenty of water. Remove contaminated clothing and wash before reuse. Get medical advice if irritation or a rash develops.
Inhalation	Move into fresh air without exposing the rescuer. Seek medical advice if unwell; obtain urgent help for breathing difficulty.
Swallowing	Clear residual product from the mouth. Do not induce vomiting. Call the National Poisons Centre. Give no drinks unless instructed by the Centre. Give nothing by mouth to an unconscious person.
Symptoms / medical advice	Possible eye irritation, redness and tearing; skin or mist irritation. Finished-product toxicological effects have not been established. Treat according to clinical findings; have the label or SDS available.

05 Fire-fighting measures

Water-based formulation; not expected to be flammable from the reported ingredients. No finished-MAX flammability test has been supplied. Use extinguishing media appropriate to the surrounding fire.

Strong heating may release ammonia and sulphur oxides from the mineral ingredient, and smoke or irritating gases from organic material and packaging. Firefighters should wear self-contained breathing apparatus and full protective clothing. Cool exposed containers if safe and contain runoff.

06 Accidental release measures

Keep people clear; surfaces may be slippery. Avoid splashes and mist. Wear the protection in Section 8 and stop leaks only when safe. Bund the spill, recover pumpable liquid into compatible labelled containers, and collect residues with inert absorbent. Contain wash water. Prevent entry into drains, groundwater and waterways; use an appropriate waste service.

07 Handling and storage

Avoid swallowing, skin/eye contact and breathing spray mist. Do not eat, drink or smoke when handling. Wash hands and exposed skin afterwards. Keep children and unprotected people away; use suitable transfer equipment.

Store in a cool, dry, well-ventilated place, out of direct sunlight. Keep containers labelled, upright and secure, away from food and animal feed. Segregate from strong acids, strong alkalis and oxidising agents.

Vent the lid every 30 days during storage to release pressure. Inspect more often if the storage area gets hot. Follow safe venting procedures and keep the face away from the opening. If a tank is bulging, stop handling and contact Biocharge before opening. Do not enter tanks.

Best before: 24 months from date of manufacture, as specified by Biocharge under these storage conditions. Keep the batch number and manufacture date on the container.

Application: Use during active pasture or crop nutrient demand as part of a planned liquid nutrition programme. Match rate and frequency to crop, growth stage, soil condition, testing and the existing fertiliser programme. Agitate before and during application. Confirm water volume, compatibility, equipment suitability and grazing/harvest advice with Biocharge.

08 Exposure controls / personal protection

Engineering controls	Minimise splashing and mist. Provide ventilation and accessible clean washing and eye-rinse water. Avoid confined or poorly ventilated handling areas.
Eyes / face	Wear chemical splash goggles when mixing, transferring or applying. Add face protection where substantial splashing is possible.
Hands / body	Wear suitable chemical-resistant gloves, protective clothing and footwear. Replace damaged gloves and wash contaminated clothing.
Respiratory protection	Avoid breathing mist. Where ventilation and work methods do not control exposure, use a suitable properly fitted respirator selected for the task.
Exposure limits	No finished-product occupational exposure limit has been established in the supplied information. Assess task-specific mist and gas exposure.

09 Physical and chemical properties

Physical state	Liquid blend containing suspended biochar; settling may occur.
Appearance / odour	Expected dark brown to black, with fish-derived and molasses odour; finished-batch description to be verified.
pH	Pending latest laboratory results; retest by **31 October 2026**. The raw fertiliser's 1% solution pH is not the pH of MAX.
Liquid density / viscosity	Density pending; retest by **31 October 2026**. Viscosity data not supplied. Raw-granule bulk density does not describe MAX.
Solubility / dispersibility	Mineral salts are introduced as water-soluble fertiliser; biochar remains suspended. Quantitative finished-product solubility and precipitation data are not supplied.
Flash point / flammability	Flash point not measured. Not expected to be flammable from the reported water-based formulation; see Section 5.
Other physical properties	Odour threshold, freezing/melting point, boiling range, vapour pressure/density, explosive limits, partition coefficient, auto-ignition and decomposition temperatures: not available.
Particle characteristics	Suspended biochar particle-size distribution: not available.

10 Stability and reactivity

Stability: Finished-mixture data are unavailable. Avoid heat, sunlight, contamination and pressure build-up; follow Section 7. Biocharge specifies 24 months best before from manufacture.

Incompatibilities: Strong acids, strong alkalis, strong oxidising agents, chlorates and nitrates are listed for the mineral ingredient. Do not mix with these materials without a specific compatibility assessment. Strong alkalis can release ammonia from ammonium salts.

Decomposition: Strong heating may release ammonia, sulphur oxides, smoke and irritating gases. Gas evolution during biological storage has not been characterised; the periodic venting instruction remains applicable.

11 Toxicological information

Finished MAX: Biocharge confirms Acute Oral Toxicity Category 4 and Eye Irritation Category 2 for this issue. No complete finished-product toxicology dataset has been supplied. The supplier data below describe the raw ingredient and are not measured toxicity results for MAX.

Updated supplier data: Cocoly is oral Category 4. The revised SDS cites an ammonium sulphate oral mouse ATE of 640 mg/kg at 54% w/w and a Cocoly ATE of approximately 1,140 mg/kg. Using those two stated inputs alone gives 640 / 0.54 = approximately 1,185 mg/kg. Both estimates lie within oral Category 4 for Cocoly; clarification of the reported value and supporting data is needed.

Concentration basis: MAX contains a calculated 233.28 g/L ammonium sulphate. Conversion to % w/w requires finished-MAX density or measured batch mass and volume. Biocharge retains its confirmed classification; review against all relevant ingredients and data when the pending pH and density results become available.

Likely routes of exposure: eye/skin contact, inhalation of spray mist and accidental swallowing. Contains fish-derived material. Possible symptoms include eye redness, tearing, skin irritation and respiratory discomfort; seek medical advice if symptoms occur.

12 Ecological information

Aquatic classification: Cocoly no longer carries an aquatic hazard classification. Biocharge confirms withdrawal of MAX's H413, which previously relied on the old supplier SDS. This does not establish absence of environmental effects.
Terrestrial vertebrates: H433 is retained under Biocharge's confirmed assessment. The supplier bases Cocoly's H433 on 54% ammonium sulphate and a 640 mg/kg oral LD50. No complete finished-MAX ecological dataset has been supplied.

Nutrient-rich spills and runoff can impair water quality. Apply only to the intended area and prevent entry into waterways. Avoid excessive application and localised nutrient accumulation.

Livestock: Keep animals away from stored product and spills. Excessive copper or selenium can be toxic; obtain veterinary or suitably qualified advice before supplementing animals grazing treated pasture. MAX-specific grazing and harvest intervals remain to be confirmed.

13 Disposal considerations

Recover reusable material only when safe. Collect unusable product, absorbent and wash water for disposal through an appropriate waste service in accordance with local requirements. Do not discharge to drains or waterways. Use an accepted container-recovery arrangement; do not reuse packaging for food, feed or drinking water.

14 Transport information

Finished MAX status	Biocharge specifies MAX as not dangerous goods for road, rail, sea or air, following the Cocoly supplier transport guidance. This status is based on manufacturer confirmation, not finished-product transport testing.
Ingredient information	The Cocoly supplier reports its raw fertiliser as non-dangerous goods by road, rail, sea and air. MAX is a liquid blend; the supplier's granular shipping description is not used for MAX.
UN number / proper name	Not applicable - not classified as dangerous goods.
Class / packing group	Not applicable - not classified as dangerous goods.
Environmental hazards	Not classified as a marine pollutant on the manufacturer-confirmed transport basis.
Practical precautions	Keep upright, secured and protected from heat/damage. Segregate from strong acids, alkalis and oxidisers. Prevent leaks; carry spill equipment.

15 Regulatory information

HSNO approval: HSR002571 - Fertilisers (Subsidiary Hazard) Group Standard 2020. Biocharge confirms MAX meets the scope and the required assignment record is held. The updated Cocoly SDS also cites HSR002571. The manufacturer has confirmed this revised MAX assessment for release.

ACVM: Supplied for fertiliser/plant-biostimulant use. Registration exemption remains subject to the applicable ACVM Regulations and MPI requirements, including composition, claims and directions. This SDS is not MPI certification.

16 Other information

Version 1.1 - issued 18 September 2026. Supersedes Version 1.0 (16 September 2026). Manufacturer-confirmed update: H413 removed; H302, H319 and H433 retained; potassium sulphate disclosed; supplier toxicity and HSNO references updated. Nutrient estimates and data limitations remain.

Review: Nutrient content, pH and density retesting due by **31 October 2026**, or update sooner when relevant information is received.

Sources: Biocharge formulation/assessment records; transcribed Cocoly COA; revised Rainbow & Brown raw-material SDS received 18 September 2026 (still dated 15 September 2026, v1.0); Boost ingredient records; EPA GHS guidance; National Poisons Centre.

Key: SDS: safety data sheet; GHS: Globally Harmonised System; HSNO: Hazardous Substances and New Organisms Act; ACVM: Agricultural Compounds and Veterinary Medicines Act; CAS: chemical identifier; LD50: median lethal dose; w/v: weight/volume; w/w: weight/weight.