

Safety Data Sheet

1. IDENTIFICATION OF SUBSTANCE/MIXTURE AND COMPANY

1.1 Product identifier

Quadrop Balance FS, Quadrop FS, Quadrop Balance FF, Quadrop FF, Quadrop Balance FN, Quadrop FN, Quadrop Control.

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

Recommended uses Fertiliser and water treatment. For professional use only.

Uses advised against Consumer use

1.3 Details of the supplier of the safety data sheet

Terralift UK Ltd, PO Box 934, Stockport, SK5 9BP, United Kingdom. Tel:+44(0)1778380005 Fax: +44(0)1778348835 Email:admin@terralift.eu

1.4 Emergency telephone number

Tel:+44(0)1778380005

Product AT USE DILUTION:
Up to 250ml/1000 litres of water
(<0.1% concentration)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

Mixture

Regulation (EC) No. 1272/2008: Skin corrosion/irritation – Category 1A (H314)

2.2 Label elements

Pictogram(s)



Product AT USE DILUTION
Not classified as hazardous. Not corrosive.

Signal word:

DANGER

Hazard statements:

H314: Causes severe skin burns and eye damage.

Precautionary statements:

P260: Do not breathe dust, fume, gas, mist, vapours or spray.

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.

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 CENTRE or doctor

Other hazards:

May be corrosive to aluminium, copper and zinc, releasing hydrogen gas.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Ingredients	EC-No	CAS number	REACH registration	Classification according to Regulation (EC). 1272/2008 (CLP)	% w/w
Dihydrogen sulphate, solution >51%	231-639-5	7664-93-9	01-2119458838-20	Skin Corr. 1A (H314)	<50%
Other ingredients	-	-	-	Not classified	to 100

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice	Show this SDS to the doctor in attendance. First responder needs to protect themselves.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
Skin Contact:	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Eye Contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Ingestion:	Do not induce vomiting. Call a physician or Poison Control Center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor
Treat symptomatically

Product AT USE DILUTION

Ingestion: Seek medical attention if symptoms occur
Eye contact: Rinse with water if irritation occurs
Skin contact: Wash with water if irritation occurs
Inhalation: No special measures required. Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media
Substance is non-flammable; use agent most appropriate to extinguish surrounding fire.

Unsuitable extinguishing media
Water

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products:
Hydrogen, Sulfur oxides.

5.3 Advice for fire fighters

As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:
Use personal protective equipment. Wear self-contained breathing apparatus and protective suit. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

For emergency responders
Use personal protection recommended in section 8.

6.2 Environmental precautions

Avoid release to the environment. See Section 12 for additional ecological information.

6.3 Methods and material for containment and cleaning up

Methods for containment
Soak up with inert absorbent material.

Methods for clean-up
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Product AT USE DILUTION
 Use personal protective equipment as required
 Contain or collect where possible.
 Avoid contaminating drinking water
 Allow to filtrate through soil.

7. HANDLING & STORAGE

7.1 Precautions for safe handling

General occupational hygiene advice

Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not breathe vapors. Do not ingest. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

Packaging materials:

UN approved HDPE containers 5, 20, 200 and 1000 litres.

Other advice

7.3 Specific end use(s)

Specific uses

See section 1.2

Product AT USE DILUTION
 Keep out of reach of children
 Identify treated water as unsuitable for drinking.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Dihydrogen sulphate	
Belgium	TWA: 0.05 mg/m ³ 8 hr
Denmark	TWA: 0.05 mg/m ³ 8 hr
Ireland	T TWA: 0.05 ppm 8 hr. STEL: 0.15 ppm 15 min
Portugal	TWA: 0.05 mg/m ³ 8 hr
Spain	TWA: 0.05 mg/m ³ 8 hr
UK	STEL: 0.15 mg/m ³ 15 min TWA: 0.05 mg/m ³ 8 hr

8.2 Exposure controls

Personal protective equipment

Eye / face protection:

Goggles (European standard - EN 166)

Skin and body protection:

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory protection:

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

Hand protection:

Protective gloves

Work / Hygienic practices:

Wash hands before eating, drinking or smoking.

Environmental exposure controls

Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water.

Product AT USE DILUTION
 No special protection is required under normal use conditions.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:

Clear brown liquid

Odour:

None

pH:

1

Melting point/freezing point

Crystallizes below 5°C

Boiling point/range	140°C at 1013hPa
Flash point:	>125°C
Evaporation rate	No data available
Flammability (solid, gas):	Non-flammable
Vapour pressure:	Not applicable
Vapour density	900 Pa at 25°C
Specific gravity:	1.52kg/l
Water solubility:	Totally miscible in water
Solubility(ies)	10g/l at 20°C (water solubility)
Partition coefficient	-1.7
Autoignition temperature	>656°C
Decomposition temperature	No data available
Explosive properties	Does not present explosion hazard (based on data of ingredients)
Oxidising properties:	No data available

9.2 Other information

Not applicable

Product AT USE DILUTION

Appearance: Clear liquid
 Odour: No odour
 pH: Dependent on water pH prior to treatment. Expect 6.0-8.0.
 Flash point: Not combustible
 Flammability: Not flammable
 Explosive behaviour: Not explosive
 Oxidising properties: Not applicable
 Vapour pressure: Not applicable
 Relative density: 1.0kg/l
 Solubility: Totally miscible in water

10. STABILITY & REACTIVITY

10.1 Reactivity

Not reactive.

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials

Strong acids, strong bases, carbonates, oxidising agents.

10.6 Hazardous decomposition products

Hydrogen. Sulfur oxides.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

(a) Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Dihydrogen sulphate	2140 mg/kg (rat)	No data	LC50 = 510 mg/m ³ (Rat) 2 h

(b) Skin corrosion/irritation

Category 1A

(c) Serious eye damage/eye irritation

Category 1

(d) Respiratory or skin sensitisation

No information available

(e) Germ cell mutagenicity

No information available

(f) Carcinogenicity

No information available

(g) Reproductive toxicity

No information available

(h) STOT-single exposure

No information available

(i) STOT-repeated exposure

No information available

(j) Aspiration hazard No information available

Absence of specific data

No test data is available for the mixture as a whole. Data on ingredient substances has been provided where relevant.

Product AT USE DILUTION
No known significant effects or critical hazards. Not suitable as drinking water.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity: Do not allow product to enter the environment uncontrolled.

Component	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Dihydrogen sulphate	EC50 (Algae, 72 h) : >100 mg/l (Desmodesmus subspicatus)	LC50: 1628 mg/L, 96h static (Lepomis macrochirus)	No data	EC50 (Daphnia magna, 48 h) : >100 mg/l

12.2 Persistence and degradability

Miscible with water, Persistence is unlikely, based on information available.

12.3 Bio accumulative potential

Bioaccumulation is unlikely

12.4 Mobility in soil

The product 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 information available

12.6 Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product / packaging disposal

Dispose of waste and packaging through a waste disposal contractor in accordance with local laws.

Product AT USE DILUTION
Avoid disposal. Attempt to use the product completely in accordance with intended use.

14. TRANSPORT INFORMATION

14.1 UN Number:

3264

14.2 UN Proper shipping name

Corrosive liquid, acidic, inorganic, n.o.s. (contains dihydrogen sulphate)

14.3 Transport hazard class(es)

8

14.4 Packing group

III

14.5 Environmental hazards

No hazards identified

14.6 Special precautions for user

Tunnel code (E)

14.7 Transport in bulk according to Annex II of Marpol and the IBC code

Not applicable, packaged goods.

Product AT USE DILUTION
Not intended for transport

15. REGULATORY INFORMATION

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

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the mixture.

16. OTHER INFORMATION

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate
CAS: Chemical Abstracts Service (division of the American Chemical Society)
CLP: EU-GHS; Classification, Labelling and Packaging
EC No: European Community number
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
OEL: Occupational Exposure Limit
STEL: Short-term exposure limit
TWA: Time Weighted Average

Key literature references

EC Regulation 1907/2006 (Reach), Regulation EU No. 2015/830,
Regulation (EC) No 1272/2008.

Classification procedure

- Calculation method
- Expert judgment and weight of evidence determination

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This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

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