

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING **SAFETY DATA SHEET**

1.1 Product Identifier:

Vitax Copper Mixture

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

Use as a retail, horticultural/amenity fertiliser

1.3 Details of the supplier of the safety data sheet:

Vitax Limited
Owen Street
Coalville
LE67 3DE

1.4 Emergency phone number

Tel: +44 (0)1530 510060 Fax: +44 (0) 1530 510299 Email: info@vitax.co.uk

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFICATION according to Directive EC 1272/2008 Classification, Labelling and Packaging

Eye Damage 1	H318	Causes serious eye damage
Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects

CLASSIFICATION according to Directive 1999/45/EC and statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulation)

N; R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Primary Hazard

Causes serious eye damage.

2.2 Label Elements

(contains: Manganese sulphate E.C. 232-089-9, Copper oxychloride E.C. 215-572-9, Zinc oxide E.C. 215-222-5)



Signal word: Danger

Hazard Statements:

H318	Causes serious eye damage
H411	Toxic to aquatic life with long lasting effects

Precautionary Statements

P260	Do not breathe dust/spray.
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 or doctor/physician.
P391	Collect spillage
P501	Dispose of contents/container in accordance with local/national regulation










2.3 Other Hazards



Mixture not classed as PBT or vPvB

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product Code: tbc

3.2 Mixtures

Chemical Name	CAS-No./ EINECS-No.	Annex Index or REACH number	Symbol(s)	R-phrases(s)	Concentrations [%]
Manganese sulphate	10034-96-5/ 232-089-9	Index no.: 025-003-00-4 REACH registration no.: 01-2119456624-35	<p>According to 1272/2008: GHS05</p>  <p>GHS08</p>  <p>GHS09</p>  <p>According to 67/548/EEC:  Xn – HARMFUL</p>  <p>N – DANGEROUS FOR THE ENVIRONMENT</p>	<p>According to 1272/2008: Eye Damage 1, H318 STOT Rep. 2, H373 Aqu. Tox. chron. 2, H411</p> <p>According to 67/548/EEC: R48/20/22 R51/53</p>	5.0 – 9.9
Copper oxychloride	1332-65-6/ 215-572-9	-	<p>According to 1272/2008: GHS07</p>  <p>GHS09</p>  <p>According to 67/548/EEC:  Xn - HARMFUL</p>  <p>N – DANGEROUS FOR THE ENVIRONMENT</p>	<p>According to 1272/2008: Acute Tox. 4 - H302 Environmental Aquatic Acute 1 – H400 Aquatic Chronic 1 - H410</p> <p>According to 67/548/EEC: R22, R50/53</p>	5.0 – 10.0

Zinc oxide	1314-13-2/ 215-222-5	Index no.: 030-013-00-7 REACH registration no.: 01-2119463881-32	According to 1272/2008: GHS02 GHS09  According to 67/548/EEC:  N – DANGEROUS FOR THE ENVIRONMENT	According to 1272/2008: Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 According to 67/548/EEC: R50/53	< 5.0
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The full hazard information for individual components if not displayed in section 2 or 3 is displayed in Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

4.1.1 Inhalation

If symptoms arise remove from source of exposure to fresh air; seek medical attention if symptoms persist or develop

4.1.2 Skin & Eye exposure

Skin: Drench immediately with water. Remove any contaminated clothing and launder before re-use. Seek medical attention if symptoms persist or develop.

Eyes: Immediately rinse with clean water for 15 minutes. Obtain medical attention IMMEDIATELY.

4.1.3 Ingestion

Do not induce vomiting. Wash out mouth with water and give water to drink. Seek medical attention if symptoms persist or develop.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye damage.

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

Information not available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use foam, carbon dioxide, dry powder, sand. The mixture is not classified as flammable as such extinguishing media should also be chosen as appropriate for surrounding materials.

5.2 Special Hazards arising from the substance or mixture

Possible irritant fumes arising from combustion

5.3 Advice for fire-fighters

Cool down containers/equipment exposed to heat with a water spray. Contain spread of extinguishing fluids (these fluids may be hazardous for the environment). Wear complete protective clothing and self-contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

The following precautions are considered to be good practice when using any chemicals irrespective of their classification unless otherwise specified.

Ensure adequate ventilation

Use personal protective equipment,

- Gloves

- Eye protection

- Suitable respirator if dust is generated during handling

6.2 Environmental Precautions

Do not allow to enter storm drains or water courses. If this product enters a water course or a sewer (including via contaminated soil & vegetation) in large quantities contact local water authority and inform the Environment Agency

6.3 Methods and material for containment and cleaning up

Sweep avoiding generating dust into labelled containers for recovery or contact specialist waste disposal contractor.

6.4 Reference to other sections

See also section 8

7. HANDLING AND STORAGE

7.1 Precaution for safe handling

Avoid contact with skin and eyes. Wash Hands thoroughly after handling
Do not eat, drink or smoke when using this product

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool dry atmosphere, in original labelled containers. Refer to manufacturer for maximum safe stacking height. Keep away from heat sources, combustible materials and strong oxidising agents.

7.3 Specific end use(s)

No Information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Workplace exposure Limits as defined by UK HSE in document EH40/2005 where available:

Substance	CAS number	Workplace Exposure Limit				Comments
		Long-term exposure limit (8-hr TWA reference period)		Short-term exposure limit (15 minute reference period)		
		ppm	mg.m ⁻³	ppm	mg.m ⁻³	
Manganese and its inorganic compounds (as Mn)		-	0.5	-	-	The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to the substances identified in IOELV Directives*

*IOELV – Indicative Occupational Exposure Limit Values (IOELV).

8.2 Exposure controls

The following precautions are considered to be good practice when using any chemicals irrespective of their classification unless otherwise specified.

Primary Hazard considered as handling of concentrate.

Gloves: to BS EN374 of gauntlet type in Natural Rubber or PVC (not Nitrile) recommended for acid resistance.

Clothing: Coveralls/apron to BS EN465/466/467

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance; Green solid

Odour; No Information available

Odour threshold; No Information available

pH; No Information available

Melting point/freezing; No Information available

Initial boiling point and boiling range; No Information available

Flash point; No Information available

Evaporation rate; No Information available

Flammability (solid, gas); Mixture is not classed as flammable

Upper /lower flammability or explosive limits; Mixture is not classed as explosive

Vapour Pressure; No Information available

Vapour density; No Information available

Specific Gravity; No Information available

Solubility (ies); No Information available

Partition coefficient: n-octanol/water; No Information available

Auto ignition temperature: No Information available

Decomposition temperature: No Information available

9.2 Other Information

No other relevant information available

10. STABILITY AND REACTIVITY

10.1 Reactivity

Unknown

10.2 Chemical Stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

Information not available

10.4 Conditions to avoid

Extremes of temperature

10.5 Incompatible materials

None known

10.6 Hazardous decomposition products

Possible Irritant fumes

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

The mixture has not been assessed for toxicological effects, the mixture classification is given in section 2 based on individual component contents. Individual component hazards are given in section 3

Toxicological information on individual components where available:

Manganese sulphate:

HEALTH WARNINGS

INHALATION. Prolonged inhalation of high concentrations may damage respiratory system.

SKIN CONTACT. Acts as a defatting agent on skin. May cause cracking of skin, and eczema. Prolonged or repeated exposure may cause severe irritation.

EYE CONTACT. May cause severe irritation to eyes.

INGESTION. The product causes irritation of mucous membranes and may cause abdominal discomfort if swallowed.

TARGET ORGANS Skin Eyes Respiratory system, lungs

Copper oxychloride:

TOXIC DOSE 1 - LD 50 700-1800 mg/kg (oral rat)

TOXICOLOGICAL INFORMATION

Substance not fully tested. Believed to be toxic by ingestion

INHALATION Vapours irritate the respiratory system, and may cause coughing and difficulties in breathing.

INGESTION Irritating. May cause nausea, stomach pain and vomiting.

SKIN CONTACT Irritating to skin.

EYE CONTACT May cause temporary eye irritation.

HEALTH WARNINGS This chemical may cause skin/eye irritation.

Zinc oxide:

Toxic Dose 1 - LD 50 7950 mg/kg (oral-mouse)

Toxic Dose 2 - LD 50 > 15000 mg/kg (oral rat)

Toxic Conc. - LC 50 > 5.7 mg/l/4h (inh-rat)

Inhalation: Dust in high concentrations may irritate the respiratory system.

Ingestion: May cause discomfort if swallowed.

Skin Contact: Powder may irritate skin. Mild dermatitis, allergic skin rash.

Eye Contact: Particles in the eyes may cause irritation and smarting.

Medical Considerations: Inhalation of dusts may irritate the respiratory tract. Zinc is present in drugs (medication) in small amounts up to 25 mg.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Mixture Classified as Toxic to aquatic life with long lasting effects in accordance with the Dangerous Preparations Directive 1999/45/EC

12.2 Persistence and degradability

Information not available

12.3 Bioaccumulative potential

Information not available

12.4 Mobility in soil

Information not available

12.5 Results of PBT and vPvB

Not classified

12.6 Other adverse effects

Information not available

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Use only licensed waste disposal companies for unwanted chemical. Do not re-use empty containers for any purpose.

14. TRANSPORT INFORMATION

14.1 UN number: UN3077

14.2 UN proper shipping name: Environmentally hazardous preparation, solid N.O.S. (contains: Manganese sulphate E.C. 232-089-9, Copper oxychloride E.C. 215-572-9, Zinc oxide E.C. 215-222-5)

14.3 Transport hazard 9

14.4 Packing group: 3

14.5 Environmental hazards: Product is classified as Toxic to aquatic life with long lasting effects.

14.6 Special precautions for user: No information available

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

Applicable for Maritime bulk transport only. Check with carrier.

15. REGULATORY INFORMATION

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

This substance is classified and labelled in accordance with regulation 1999/45/EC, 1272/2008, the statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulations and the EC Fertiliser Regulations 2003, 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, including amendments.

15.2 Chemical Safety Assessment

CSA not undertaken for this substance

16. OTHER INFORMATION

Hazard Information not otherwise listed in full elsewhere:

R22:	Harmful if swallowed.
R48/20/22 Harmful:	danger of serious damage to health by prolonged exposure through inhalation and if swallowed
R50/53:	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
H302:	Harmful if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure
H400:	Toxic to aquatic life.
H410:	Very toxic to aquatic life with long lasting effects.

SDS information:

This Safety data sheet is compiled using data submitted for raw materials and practical experience. This product is intended for professional users only.

This Safety Data Sheet is prepared in compliance with Directive 1999/45/EC, regulation 1272/2008 and Annex I of the REACH regulation 453/2010.

THE INFORMATION GIVEN HEREIN IS, TO THE BEST OF OUR KNOWLEDGE, CORRECT AND IS PRESENTED IN GOOD FAITH BUT NO WARRANTY, EXPRESSED OR IMPLIED IS GIVEN.