# VITAX SAFETY INFORMATION SHEET

Date of Issue: February 2004
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## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**1.1. Product identifier** ENHANCE R OUTFIELD AUTUMN & WINTER 6-2-10+TE

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

Fertiliser

**1.3. Details of the supplier of the safety data sheet**

Vitax Limited, Owen Street, Coalville, Leicestershire LE67 3DE
Tel: +44 (0) 1530 510060 Fax: +44 (0) 1530 510299

**1.4. Emergency telephone number** Tel: +44 (0) 1530 510060 Mon - Fri 9am - 5pm

## SECTION 2: HAZARDS IDENTIFICATION

**2.1. Classification of the substance or mixture**

| Classification | |
|---|---|
| Physical hazards | Not Classified |
| Health hazards | Eye Irrit. 2 - H319 |
| Environmental hazards | Aquatic Chronic 3 - H412 |

**2.2. Label elements**

| | |
|---|---|
| Pictogram | |
| Signal word | Warning |
| Hazard statements | H319 Causes serious eye irritation.<br>H412 Harmful to aquatic life with long lasting effects. |
| Precautionary statements | P264 Wash contaminated skin thoroughly after handling.<br>P273 Avoid release to the environment.<br>P280 Wear protective gloves/protective clothing/eye protection/face protection.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P337+P313 If eye irritation persists: Get medical advice/attention.<br>P501 Dispose of contents/container in accordance with national regulations. |

**2.3. Other hazards**

This substance is not classified as PBT or vPvB according to current EU criteria.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.2. Mixtures**

| Chemical Name | CAS-No./ EINECS-No. | Symbol(s) and phrases | Precautionary statements: | Concentration [%] |
|---|---|---|---|---|
| SSP Single Superphosphate | 8011-76-5/ 232-379-5 | Eye Irrit. 2 - H319 | | 10-30% |
| Zinc Sulphate Monohydrate | 7446-20-0/ 231-793-3 | Acute Tox. 4 - H302<br>Eye Dam. 1 - H318<br>Aquatic Acute 1 - H400<br>Aquatic Chronic 1 - H410<br>M factor (Acute) = 1<br>M factor (Chronic) = 1 | | <1% |
| Boric acid (boron) | 10043-35-3/ 233-139-2 | Repr. 1B - H360FD | | <1% |
| Copper Sulphate | 7758-99-8/ 231-847-6 | Acute Tox. 4 - H302<br>Skin Irrit. 2 - H315<br>Eye Irrit. 2 - H319<br>Aquatic Acute 1 - H400<br>Aquatic Chronic 1 - H410<br>M factor (Acute) = 10<br>M factor (Chronic) = 10 | | <1% |
| Manganese Sulphate Monohydrate | 10034-96-5 / 232-089-9 | Eye Dam. 1 - H318<br>STOT RE 2 - H373<br>Aquatic Chronic 2 - H411 | | <1% |

The Full Text for all Hazard Statements are Displayed in Section 16.

## SECTION 4: FIRST AID MEASURES

**4.1. Description of first aid measures**

| | |
|---|---|
| Inhalation | Get medical attention if symptoms are severe or persist. |
| Ingestion | Get medical attention if symptoms are severe or persist. |

| | |
|---|---|
| Skin contact | Wash skin thoroughly with soap and water or use an approved skin cleanser. Get medical attention if symptoms are severe or persist after washing. |
| Eye contact | Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 10 minutes. Get medical attention if symptoms are severe or persist after washing. |

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

| | |
|---|---|
| Inhalation | Dust in high concentrations may irritate the respiratory system. |
| Ingestion | No harmful effects expected from quantities likely to be ingested by accident. |
| Skin contact | Skin irritation should not occur when used as recommended. |
| Eye contact | Prolonged or repeated exposure may cause severe irritation. May cause severe eye irritation. |

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

| | |
|---|---|
| Notes for the doctor | Treat symptomatically. |

## SECTION 5: FIREFIGHTING MEASURES

**5.1. Extinguishing media**

| | |
|---|---|
| Suitable extinguishing media | The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. |
| Unsuitable extinguishing media | Not applicable. |

**5.2. Special hazards arising from the substance or mixture**

| | |
|---|---|
| Specific hazards | None known. |

**5.3. Advice for firefighters**

| | |
|---|---|
| Protective actions during firefighting | No specific firefighting precautions known. |
| Special protective equipment for firefighters | Use protective equipment appropriate for surrounding materials. |

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1. Personal precautions, protective equipment and emergency procedures**

| | |
|---|---|
| Personal precautions | Avoid inhalation of dust and contact with skin and eyes. Use suitable respiratory protection if ventilation is inadequate. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Take care as floors and other surfaces may become slippery. |

**6.2. Environmental precautions**

| | |
|---|---|
| Environmental precautions | The product is slowly degradable. Avoid the spillage or runoff entering drains, sewers or watercourses. Harmful to aquatic life with long lasting effects. |

**6.3. Methods and material for containment and cleaning up**

| | |
|---|---|
| Methods for cleaning up | Take care as floors and other surfaces may become slippery. Collect and dispose of spillage as indicated in Section 13. |

**6.4. Reference to other sections**

| | |
|---|---|
| Reference to other sections | For personal protection, see Section 8. For waste disposal, see Section 13. |

## SECTION 7: HANDLING AND STORAGE

**7.1. Precautions for safe handling**

| | |
|---|---|
| Usage precautions | Read label before use. Wear appropriate clothing to prevent repeated or prolonged skin contact. Avoid inhalation of dust and contact with skin and eyes. |
| Advice on general occupational hygiene | Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet. |

**7.2. Conditions for safe storage, including any incompatibilities**

| | |
|---|---|
| Storage precautions | Store in a dry place. |

**7.3. Specific end use(s)**

| | |
|---|---|
| Specific end use(s) | The identified uses for this product are detailed in Section 1.2. |

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1. Control parameters**

| | |
|---|---|
| Occupational exposure limits | |
| Sand (L) | Long-term exposure limit (8-hour TWA): Silica Dust (respirable) WEL 0.1 mg/m$^3$ |
| Ammonium Sulphate | Long-term exposure limit (8-hour TWA): LTEL 10 mg/m$^3$ |
| Urea | Long-term exposure limit (8-hour TWA): WEL 10 mg/m$^3$ inhalable dust<br>Long-term exposure limit (8-hour TWA): WEL 4 mg/m$^3$ respirable dust |
| Boric acid (boron) | Long-term exposure limit (8-hour TWA): 10 mg/m$^3$ |
| Manganese Sulphate Mono | Long-term exposure limit (8-hour TWA): WEL 0.5 mg/m$^3$ |
| WEL = Workplace Exposure Limit | |
| Potash (CAS: 7447-40-7) | DNEL Workers - Dermal; Short term systemic effects: 580 mg/kg/day |

| | |
|---|---|
| | Workers - Dermal; Long term systemic effects: 580 mg/kg/day |
| | Workers - Inhalation; Short term systemic effects: 292 mg/m³ |
| | Workers - Inhalation; Long term systemic effects: 292 mg/m³ |
| | PNEC Industry - Fresh water; 0,047 mg/l |
| | - Marine water; 0,047 mg/l |
| SSP Single Superphosphate (CAS: 8011-76-5) | |
| | DNEL Workers - Inhalation; Long term systemic effects: 3.1 mg/m³ |
| | Workers - Dermal; Long term systemic effects: 17.4 mg/kg/day |
| | General population - Inhalation; Long term systemic effects: 0.9 mg/m³ |
| | General population - Oral; Long term systemic effects: 2.1 mg/kg/day |
| | General population - Dermal; Long term systemic effects: 10.4 mg/kg/day |
| | PNEC - Fresh water; 1.7 mg/l |
| | - Marine water; 0.17 mg/m³ |
| | - Intermittent release; 17 mg/l |
| | - STP; 10 mg/l |
| Zinc Sulphate Monohydrate (CAS: 7446-20-0) | |
| | DNEL Industry - Inhalation; Long term systemic effects: 1 mg/m³ |
| | Industry - Dermal; Long term systemic effects: 8.3 mg/kg/day |
| | Consumer - Oral; Long term systemic effects: 0.83 mg/kg/day |
| | Professional - Inhalation; Long term systemic effects: 1.3 mg/m³ |
| | Consumer - Dermal; Long term systemic effects: 8.3 mg/kg/day |
| | PNEC - Fresh water; 0.0206 mg/l |
| | - Marine water; 0.0061 mg/l |
| | - Sediment (Freshwater); 235.6 mg/kg |
| | - Sediment (Marinewater); 113 mg/kg |
| | - Soil; 106.8 mg/kg |
| | - STP; 0.0052 mg/l |
| Boric acid (boron) (CAS: 10043-35-3) | DNEL Industry - Dermal; Long term systemic effects: 68.6 mg/kg/day |
| | Industry - Inhalation; Long term systemic effects: 1.45 mg/m³ |
| | Consumer - Oral; Long term systemic effects: 0.17 mg/kg/day |
| | Consumer - Inhalation; Long term systemic effects: 0.97 mg/m³ |
| | Consumer - Oral; Short term systemic effects: 0.17 mg/kg/day |
| | Consumer - Dermal; Long term systemic effects: 34.3 mg/kg/day |
| | PNEC - Fresh water; 1.35 mg/l |
| | - Marine water; 1.35 mg/l |
| | - Intermittent release; 9.1 mg/l |
| | - Sediment; 1.8 mg/kg |
| | - Soil; 5.4 mg/kg |
| | - STP; 1.75 mg/l |
| Copper Sulphate (CAS: 7758-99-8) | DNEL Industry - Oral; Long term systemic effects: 0.041 mg/kg/day |
| | Industry - Oral; Short term systemic effects: 0.082 mg/kg/day |

**8.2. Exposure controls**

| | |
|---|---|
| Protective equipment | Appropriate engineering controls. All handling should only take place in well-ventilated areas. |
| Eye/face protection | Wear eye protection. |
| Hand protection | Wear protective gloves. |
| Other skin and body protection | Wear appropriate clothing to prevent repeated or prolonged skin contact. |
| Hygiene measures | Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. |
| Respiratory protection | No specific recommendations. |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**9.1. Information on basic physical and chemical properties**

| | |
|---|---|
| Appearance | Granules. |
| Colour | Beige. to Dark brown. or Black. |
| Odour | Mild. |
| Odour threshold | Not determined. |
| pH | Slightly Acidic |
| Melting point | Not relevant. |
| Initial boiling point and range | Not relevant. |
| Flash point | Not relevant. |
| Evaporation rate | Not relevant. |

| | |
|---|---|
| Flammability (solid, gas) | The product is not flammable. |
| Vapour pressure | Not relevant. |
| Vapour density | Not relevant. |
| Relative density | Not relevant. |
| Solubility(ies) | Not known. |
| Partition coefficient | Not known. |
| Auto-ignition temperature | Not relevant. |
| Decomposition Temperature | Not relevant. |
| Viscosity | Not relevant. |
| Explosive properties | Not relevant. |
| Oxidising properties | Does not meet the criteria for classification as oxidising. |
| **9.2. Other information** | No information required. |

## SECTION 10: STABILITY AND REACTIVITY

| | |
|---|---|
| **10.1. Reactivity** | No test data specifically related to reactivity available for this product or its ingredients. |
| **10.2. Chemical stability** | Stable when stored in a dry place. |
| **10.3. Possibility of hazardous reactions** | No potentially hazardous reactions known. |
| **10.4. Conditions to avoid** | There are no known conditions that are likely to result in a hazardous situation. |
| **10.5. Incompatible materials** | None known. |
| **10.6. Hazardous decomposition products** | None known. |

## SECTION 11: TOXICOLOGICAL INFORMATION

**11.1. Information on toxicological effects**

| | |
|---|---|
| Acute toxicity – oral | |
| Notes (oral LD50) | No specific test data are available. |
| Acute toxicity - dermal | |
| Notes (dermal LD50) | No specific test data are available. |
| Acute toxicity - inhalation | |
| Notes (inhalation LC50) | No specific test data are available. |
| Serious eye damage/irritation | Irritation of eyes is assumed. In-vitro testing conducted on products with SSP Content <62%, 2015, Result: Reduced classification to Eye Irritant. Test Guideline OECD 438. This result is less severe than the harmonized classification for Super Phosphates as Eye Damage 1 H318. |
| Respiratory sensitisation | No specific test data are available. |
| Skin sensitisation | Not determined. |
| Germ cell mutagenicity | |
| Genotoxicity - in vitro | This substance has no evidence of mutagenic properties. |
| Carcinogenicity | No specific test data are available. |
| Reproductive toxicity | |
| Reproductive toxicity – fertility | Contains a small amount of Boron which is a SVHC and may damage fertility and may cause damage to the unborn child. |
| Specific target organ toxicity - single exposure | |
| STOT - single exposure | Not classified as a specific target organ toxicant after a single exposure. |
| Specific target organ toxicity - repeated exposure | |
| STOT - repeated exposure | Not classified as a specific target organ toxicant after repeated exposure. Contains Manganese Sulphate Mono - STOT RE2 - Target Organ - Brain. Supplier information: "MnSO4 is already classified under Directive 67/548/EEC as R48/20/22 and under GHS as STOT RE2. Data exists showing some neurochemical changes at low levels after inhalation exposure for 90 days, together with locomotor changes, around 3mg/$m^3$ concentration, suggesting that significant toxicity could occur at the 20-200 mg/$m^3$ concentration level, which supports the current classification of STOT RE 2 for the inhalation route. " |
| Aspiration hazard | Not anticipated to present an aspiration hazard, based on chemical structure. |
| Eye contact | The product is considered to be a low hazard under normal conditions of use. May cause eye irritation. |

## SECTION 12: ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity | Harmful to aquatic life with long lasting effects. The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. Contains Copper Sulphate Contains Manganese Sulphate Mono Contains Zinc Sulphate Mono |

| | |
|---|---|
| **12.1. Toxicity** | |
| **12.2. Persistence and degradability** | The product is slowly degradable. |
| **12.3. Bioaccumulative potential** | Partition coefficient Not known. |
| **12.4. Mobility in soil** | No data available. |
| **12.5. Results of PBT and vPvB assessment** | This product does not contain any substances classified as PBT or vPvB. |
| **12.6. Other adverse effects** | Not relevant. |

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods**

| | |
|---|---|
| General information | Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. |
| Disposal methods | Reuse or recycle products wherever possible. No specific disposal method required. |

## SECTION 14: TRANSPORT INFORMATION

| | |
|---|---|
| General | The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID). |
| **14.1. UN number** | Not applicable. |
| **14.2. UN proper shipping name** | Not applicable. |
| **14.3. Transport hazard class(es)** | No transport warning sign required. |
| **14.4. Packing group** | Not applicable. |
| **14.5. Environmental hazards** | |
| Environmentally hazardous substance/ marine pollutant | No. |
| **14.6. Special precautions for user** | Not applicable. |

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

## SECTION 15: REGULATORY INFORMATION

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

EU legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). 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) (as amended).

**15.2. Chemical safety assessment** No chemical safety assessment has been carried out.

## SECTION 16: OTHER INFORMATION

**Reason for revision:** Replaces version dated August 2013. MSDS re-formatted in-line with regulation 453/2010 all sections affected.

**Hazard statements in full**

H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H360FD May damage fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

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