

MATERIAL SAFETY DATA SHEET  
10-4-4



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

**1.1 Product identifier**

Product name 10-4-4  
REACH registration notes This Mixture is exempt from REACH registration according to Regulation (EC) No 1907/2006 (REACH).

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

Identified uses Fertiliser

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

Supplier Angus Horticulture  
Polmood, Guthrie  
Forfar, Angus, DD8 2TW  
[sales@angus-horticulture.co.uk](mailto:sales@angus-horticulture.co.uk)

**1.4 Emergency telephone number**

Emergency telephone number +44 (0) 1241 829049

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification (EC1272/2008)**

Physical hazards Not classified  
Health hazards Eye Irrit 2 H318  
Environmental hazards Not classified

**2.2 Label elements**

**Hazard pictograms**



Signal word Danger

Hazard statements EUH208 contains nickel sulfate. May produce an allergic reaction  
H318 Causes serious eye damage

Precautionary statements 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 CENTRE/Doctor

Contains Calcium Nitrate

**Supplementary Precautionary Statements**

P264 Wash contaminated skin thoroughly after handling  
P321 Specific treatment (see medical advice on this label)  
P330 Rinse mouth  
P332+P313 If skin irritation occurs: Get medical advice/attention  
P362+P364 Take off contaminated clothing and wash it before use

**2.3 Other hazards**

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

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**SECTION 3: Composition/information on ingredients**

**3.2 Mixtures**

<b>Calcium Nitrate</b> CAS Number: 15245-12-2 <b>Classification</b> Acute Tox 4      H302 Eye Dam 1        H318	EC Number: 239-289-5 REACH registration Number: 01-2119488967-16-XXXX <b>Classification (67/548/EEC or 1999/45/EC)</b> Xn; R22 Xi; R41	<b>10-30%</b>
<b>Iron (II) sulfate</b> CAS Number: 7720-78-7 <b>Classification</b> Acute Tox 4      H302 Skin Irrit 2      H315 Eye Irrit 2       H319	EC Number: 231-753-5	<b>5-10%</b>
<b>SSP Single Superphosphate</b> CAS Number: 8011-76-5 <b>Classification</b> Eye Irrit 2       H319	EC Number: 232-379-5 REACH registration Number: 01-2119488967-11-XXXX <b>Classification (67/548/EEC or 1999/45/EC)</b> Xi; R41	<b>5-10%</b>
<b>Powder TSP</b> CAS Number: 65996-95-4 <b>Classification</b> Eye Irrit 2       H319	EC Number: 266-030-3 REACH registration Number: 01-2119493057-33-XXX <b>Classification (67/548/EEC or 1999/45/EC)</b> Xi; R41	<b>5-10%</b>
<b>Calmag Magnesium Oxide</b> CAS Number: 1309-48-4 <b>Classification</b> Not classified	EC Number: 215-171-9	<b>1-5%</b>

The Full text for all R-Phrases and Hazard Statement are Displayed in Section 16

**SECTION 4: First Aid measures**

**4.1 Description of first aid measures**

<b>General information</b>	Get medical attention if any discomfort continues
<b>Inhalation</b>	Get medical attention if symptoms are severe or persist
<b>Ingestion</b>	Rinse mouth thoroughly with water. Do not induce vomiting unless under the direction of medical personnel. Get medical attention if symptoms are severe or persist.
<b>Skin contact</b>	Wash skin thoroughly with soap and water or use an approved skin cleanser. Get medical attention if symptoms are severe or persist after washing.
<b>Eye contact</b>	Rinse immediately with plenty water. Remove contact lenses, if present and easy to do so. 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**

<b>Inhalation</b>	Dust in high concentrations may irritate the respiratory system
<b>Ingestion</b>	No harmful effects expected from quantities likely to be ingested by accident
<b>Skin contact</b>	Prolonged contact may cause redness, irritation and dry skin. The product contains a small amount of sensitising substance. May cause allergic skin reaction.
<b>Eye contact</b>	Causes serious eye damage.

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

<b>Notes for the doctor</b>	Treat symptomatically
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**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**

**Special hazards** None known

**5.3 Advice for firefighters**

**Protective actions during firefighting** Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

**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. The product is not expected to be hazardous to the environment. Avoid the spillage or runoff entering drains, sewers or watercourses

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

**Methods for cleaning up** Take care as floors and others surfaces may become slippery. Avoid generation and spreading of dust. Collect spillage with a shovel and broom, or similar and reuse, if possible. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Dispose of contents/container in accordance with national regulations. Do not empty into drains. 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.

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**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

<b>Usage precautions</b>	Read label before use. Wear appropriate clothing to prevent repeated or prolonged skin contact. Avoid inhalation of dust and contact with skin and eyes.
<b>Advice on general occupational hygiene</b>	Do not eat, drink or smoke when using this product. 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**

<b>Storage precautions</b>	Store in a dry place. Keep container in a well-ventilated place. Keep out of reach of children. Store away from incompatible materials (see Section 10)
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**7.3 Specific end use(s)**

<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.2
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**SECTION 8: Exposure controls/Personal protection**

**8.1 Control parameters Occupational exposure limits**

<b>Calmag Magnesium Oxide</b>	Long-term exposure limit (8-hour TWA); WL 10 mg/m <sup>3</sup> inhalable dust as Mg Long-term exposure limit (8-hour TWA): WEL 4 mg/m <sup>3</sup> fume and respirable dust as Mg
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WEL = Workplace Exposure Limit

**Calcium Nitrate (CAS: 15245-12-2)**

<b>DNEL</b>	Workers - Dermal; Long term systemic effects: 13.9 mg/kg/day. Workers - Inhalation; Long term systemic effects: 98 mg/m <sup>3</sup>
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<b>PNEC</b>	- Fresh water; 0.45 mg/l - Marine water; 0.045 mg/l - Intermittent release; 4.5 mg/l - STP; 18 mg/l
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**SSP Single Superphosphate (CAS: 8011-76-5)**

<b>DNEL</b>	Workers – Inhalation; Long term systemic effects: 3.1 mg/m <sup>3</sup> Workers – Dermal; Long term systemic effects: 17.4 mg/kg/day General population – Inhalation; Long term systemic effects: 0.9 mg/m <sup>3</sup> General population – Oral; Long term systemic effects: 2.1 mg/kg/day General population – Dermal; Long term systemic effects: 10.4 mg/kg/day
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<b>PNEC</b>	- Fresh water; 1.7 mg/l - Marine water; 0.17 mg/l - Intermittent release; 17 mg/l - STP; 10 mg/l
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**8.2 Exposure Controls**

Protective equipment



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

**SECTION 9: Physical and Chemical properties**

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

<b>Appearance</b>	Granules
<b>Colour</b>	Beige to Dark Brown or Black
<b>Odour</b>	Mild
<b>Odour threshold</b>	Not determined
<b>pH</b>	Slightly Acidic
<b>Melting Point</b>	Not relevant
<b>Initial Boiling Point &amp; Range</b>	Not relevant
<b>Flash Point</b>	Not relevant
<b>Evaporation Rate</b>	Not relevant
<b>Flammability (solid, gas)</b>	The product is not flammable
<b>Vapour pressure</b>	Not relevant
<b>Vapour density</b>	Not relevant
<b>Relative density</b>	Not relevant
<b>Solubility (ies)</b>	Not known
<b>Partition coefficient</b>	Not known
<b>Auto-ignition temperature</b>	Not relevant
<b>Decomposition Temperature</b>	Not relevant
<b>Viscosity</b>	Not relevant
<b>Explosive properties</b>	Not relevant
<b>Oxidising properties</b>	Does not meet the criteria for classification as oxidising

**9.2 Other information**

<b>Other information</b>	No information required
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**SECTION 10: Stability & Reactivity**

**10.1 Reactivity**

Reactivity No test data specifically related to reactivity available for this product or its ingredients

**10.2 Chemical Stability**

Stability Stable when stored in a dry place

**10.3 Possibility of hazardous reactions**

Possibility of hazardous reactions No potentially hazardous reactions known

**10.4 Conditions to avoid**

Conditions to avoid There are no known conditions that are likely to result in hazardous situation

**10.5 Incompatible materials**

Materials to avoid Water, moisture

**10.6 Hazardous decomposition products**

Hazardous decomposition products None known

**SECTION 11: Toxicological Information**

**11.1 Information on toxicological effects**

**Acute toxicity – oral**

ATE oral (mg/kg) 2,376.43

**Acute toxicity – dermal**

Notes (dermal LD<sub>50</sub>) No specific test data are available

**Acute toxicity – inhalation**

Notes (inhalation LC<sub>50</sub>) No specific test data are available

**Skin corrosion/irritation**

Skin corrosion/irritation Based on available data the classification criteria are not met.

**Serious eye damage/irritation**

Serious eye damage/irritation Causes serious eye damage. 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 harmonised classification for Super Phosphates as Eye Damage 1 H318.

**Respiratory sensitisation**

Respiratory sensitisation No specific test data are available

**Skin sensitisation**

Skin sensitisation Based on available data the classification criteria are not met. Contains a small amount of skin sensitising substance. May cause irritation.

**Germ cell mutagenicity**

Genotoxicity – in vitro This substance has no evidence of mutagenic properties

**Carcinogenicity**

Carcinogenicity No specific test data are available.

**Reproductive toxicity**

Reproductive toxicity – fertility Based on available data the classification criteria are not met.

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**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

**Aspiration hazard**

**Aspiration hazard** Not anticipated to present an aspiration hazard, based on chemical structure

**Skin contact**

May cause skin irritation. The product contains a small amount of sensitising substance. May cause an allergic reaction

**Eye contact**

Causes serious eye damage

***SECTION 12: Ecological information***

**Ecotoxicity**

Contains Nickel Sulphate. The product is not expected to be hazardous to the environment. The product is not expected to be toxic to aquatic organisms. Not regarded as dangerous for the environment. No negative effects on the aquatic environment are known.

**12.1 Toxicity**

**12.2 Persistence and degradability**

**Persistence and degradability** The product is slowly degradable

**12.3 Bio-accumulative potential**

**Partition coefficient** Not known

**12.4 Mobility in soil**

**Mobility** No data available

**12.5 Results of PBT and vPvB assessment**

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB

**12.6 Other Adverse effects**

**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**

The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. Only store in correctly labelled containers. Dispose of the contents/container in accordance with national regulations. No specific disposal method required. Do not empty into drains.

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**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 sign warning required

**14.4 Packing group** Not applicable

**14.5 Environmental hazards**

**Environmental hazardous substance/marine pollutant** No

**14.6 Special precautions for user** Not applicable

**14.7 Transport in bulk to Annex II of MARPOL and the IBC Code**

**Transport in bulk according to Annex II of MARPOL 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 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

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**SECTION 16: Other information**

**Abbreviations & Acronyms**

**Used in the safety data sheet**

ATE	Acute Toxicity Estimate
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CAS	Chemical Abstracts Service
DNEL	Derived No Effect level
GHS	Globally Harmonised System
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
ICAO-TI	Technical Instructions for the Safe Transport of Dangerous Goods by Air
LC <sub>50</sub>	Lethal Concentration to 50% of a test population
LD <sub>50</sub>	Lethal Dose to 50% of a test population (Median Lethal Dose)
PBT	Persistent, Bio-accumulative and Toxic substance
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SVHC	Substances of Very High Concern
vPvB	very Persistent and very Bio-accumulative
cATpE	converted Acute Toxicity point Estimate
LOAEC	Lowest Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level
EC <sub>50</sub>	50% of maximal Effective Concentration
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
LOEC	Lowest Observed Effect Concentration
DMEL	Derived Minimal Effect Level

**Risk phrases in full**

R20/22	Harmful by inhalation and if swallowed
R22	Harmful if swallowed
R36/38	Irritating to eyes and skin
R38	Irritation to skin
R41	Risk of serious damage to eyes
R42/43	May cause sensitisation by inhalation and skin contact
R48/23	Toxic; danger of serious damage to health by prolonged exposure through inhalation
R49	May cause cancer by inhalation
R50/53	Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
R61	May cause harm to the unborn child
R68	Possible risk of irreversible effects

**Hazard statements in full**

H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H319	Causes serious eye damage
EUH208	Contains nickel sulfate. May produce an allergic reaction

**Disclaimer**

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