

Angus Horticulture Ltd



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Material Safety Data Sheet

1. Identification of the substance/preparation and of the company/undertaking

1.1 Product identifier

Product Name Angus Turf Care Liquid 18-5-10

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

Identified uses:

- Fertiliser

Uses identified against:

- None identified

1.3 Details of the supplier of the safety data sheet

Address: Angus Horticulture Ltd.
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1.4 Emergency telephone number

Emergency Tel: +44 (0)1674 674253

2. Hazards identification

2.1 Classification of the substance or mixture

Physical Hazards: Not classified.

Health Hazards: Eye Irrit. 2 – H319

Environmental Hazards: Not classified.

2.2 Label elements

Hazard Pictograms:



Signal Word: Warning

Hazard Statements: H319 Causes serious eye irritation.

Precautionary Statements:

Prevention: P264 Wash hands thoroughly after handling.

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

Response: P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: get medical advice/attention.

Storage: No storage statements.

Disposal: No disposal statements.

2.3 Other Hazards

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

3. Composition/information on ingredients

3.2 Mixtures

Product Name	Identifiers			% in mixture (%)	Classification according to Regulation (EC) No. 1272/2008 (CLP)
	CAS No.	EC No.	REACH Registration No.		
Potassium carbonate	584-08-7	209-529-3	01-2119532646-36-xxxx	20-25	Eye Irrit. 2 H319

4. First aid measures

4.1 Description of first aid measures

Following inhalation: Avoid inhalation of vapour, spray or mist. If inhaled, remove to fresh air. Get medical attention if symptoms are severe or persist.

Following eye contact:	Rinse cautiously with running water. Check for and remove any contact lenses if possible. Continue to rinse for at least 10 minutes. Get medical attention if symptoms are severe or persist after washing.
Following skin contact:	Remove all contaminated clothing and wash before reuse. Wash affected area thoroughly with soap and water or use an approved skin cleanser. Get medical attention if symptoms are severe or persist after washing.
Following ingestion:	Rinse mouth with water. If person is conscious, give plenty of water to drink. Consult a doctor/medical service if person feels unwell.
Self-protection of first-aiders:	No action should be taken involving any personal risk or without suitable training. Personal protective equipment for first aid responders is recommended. Wear protective gloves when assisting patient.

4.2 Most important symptoms and effects, both acute and delayed

Eye contact:	Can cause serious eye irritation. Symptoms of eye exposure include severe conjunctival irritation.
Inhalation:	In the event of inhalation, symptoms of respiratory irritation include: coughing, tears, burning behind the sternum and burning behind the eyes and nose.
Skin contact:	Skin irritation should not occur when used as recommended. In the event of skin exposure, irritation can occur.
Ingestion:	No harmful effects expected from quantities likely to be ingested by accident. In the event of ingestion, irritation to the oropharynx, oesophagus or stomach can occur.

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:	In the event of adverse response, treatment should be directed towards control of the symptoms.
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5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media:	Use a fire-extinguishing media suitable for the cause of fire.
Unsuitable extinguishing media:	Not applicable.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products:	Irritating substances may be emitted upon thermal combustion so self-contained breathing apparatus will be required.
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5.3 Advice for firefighters

Protective actions:	Dilute toxic gases with water spray.
Special protective equipment:	Use protective equipment appropriate for surrounding materials.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid inhalation of vapour, spray or mist, 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.

6.2 Environmental precautions

Environmental precautions: Prevent product from having contact with vegetation or waterways. Keep animals away from large spillages.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Soak up product with absorbent material such as dry sand or earth and shovel absorbed substance into closing containers. Clean contaminated surfaces with an excess of water. Take care as floors and other surfaces may become slippery. Wash clothing and equipment after handling. Collect and dispose of spillage as indicated in Section 13.

6.4 Reference to other sections

Refer to Sections 8, Exposure controls/personal protection, and Section 13, Disposal considerations, of SDS.

7. Handling and storage

7.1 Precautions for safe handling

Protective measures: Use appropriate personal protective equipment. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container.

Measures to prevent fire: Keep away from open flames, hot surfaces and sources of ignition.

To protect the environment: Prevent discharge in to water courses. Do not allow entrance in to sewage water.

Hygiene measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands with soap and water before eating, drinking, or smoking and again when leaving work.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures: Ensure storage is in accordance with all applicable local, regional and national regulations. Storage construction should be of non-combustible material.

Packaging materials: Store in original container.

Requirements for storage: Keep container tightly closed and sealed until ready for use. Store in a cool, well-ventilated area away from food and drink. Containers that have been opened must be resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Keep away from direct sunlight.

7.3 Specific end use(s)

Recommendations: The identified uses for this product are detailed in Section 1.2.

8. Exposure controls/personal protection

8.1 Control parameters

Urea

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust
Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

DNEL: Workers – Dermal, long-term systemic effects: 580 mg/kg bw/day
Workers – Inhalation, long-term systemic effects: 292 mg/m³
General Population – Inhalation, long-term systemic effects: 125 mg/m³
General Population – Dermal, long-term systemic effects: 580 mg/kg bw/day
General Population – Oral, long-term systemic effects: 42 mg/kg bw/day
PNEC: Freshwater: 0.47 mg/l

Potassium carbonate

Long-term exposure limit (8-hour TWA): WEL 0.5 mg/m³

DNEL: Workers – Dermal, long-term systemic effects: 16 mg/cm²
Workers – Inhalation, long-term systemic effects: 10 mg/m³
General Population – Inhalation, long-term systemic effects: 10 mg/m³
General Population – Dermal, long-term systemic effects: 8 mg/cm²
PNEC: No data available.

Monopotassium phosphate

Long-term exposure limit (8-hour TWA): Not applicable.

DNEL: Workers – Inhalation, long-term systemic effects: 4.07 mg/m³
General Population – Inhalation, long-term systemic effects: 3.04 mg/m³
PNEC: Freshwater: 0.05 mg/l
Marine water: 0.005 mg/l
Intermittent release: 0.5 mg/l
Sewage treatment plant: 50 mg/l

8.2 Exposure controls

Personal protective equipment: If insufficient ventilation, wear respiratory protection.
Protective goggles, face-shield or visor should be worn.
Protective (heat resistant) gloves should be worn.



Appropriate engineering measures: Handling should only take place in adequately ventilated areas.
Wash hands thoroughly after handling. Do not eat, drink, or smoke when using this product.
Keep away from foodstuffs, beverages and feed.

Wear appropriate clothing to prevent repeated or prolonged skin contact.

Immediately remove all contaminated clothing.

Environmental exposure controls: Do not empty in to drains, sewers, waterways or ground water systems.

9. Physical and chemical properties

Appearance:	Liquid.
Odour:	No data available.
Odour Threshold:	No data available.
pH:	No data available.
Melting point / freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash point:	No data available.
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower flammability or explosive limits:	No data available.
Vapour pressure:	No data available.
Vapour density:	No data available.
Relative density:	No data available.
Solubility(ies):	No data available.
Partition coefficient: n-octanol/water:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidising properties:	Does not meet the criteria for classification as oxidising.

10. Stability and reactivity

Reactivity:	No test data specifically related to reactivity available for this product or its ingredients.
Chemical stability:	Stable under recommended storage and handling conditions (See Section 7).
Possibility of hazardous reactions:	No potentially hazardous reactions known. This product contains potassium carbonate, which evolves carbon dioxide on reaction with acids.
Conditions to avoid:	Keep away from heat sources.
Incompatible materials:	Avoid contact with oxidising agents and acids.
Hazardous decomposition products:	On burning, toxic and corrosive gases/vapours (including carbon oxides, nitrogen oxides and oxides of phosphorus) might be released.

11. Toxicological information

11.1 Information on toxicological effects:

Acute toxicity

Product: No specific test data are available.

Potassium carbonate: LD50 Oral, rat: > 2000 mg/kg bw
LC50 Inhalation, rat: > 4.96 mg/l air (4.5 hours)
LD50 Dermal, rabbit: > 2000 mg/kg bw (24 hours)

Irritation

Product: Not classified. Irritation should not occur when used as recommended.

Potassium carbonate: Causes fully reversible dermal irritation.
Causes moderate to serious effects on cornea, iris and conjunctiva but there is no clear evidence that this eye irritation is not reversible after 21 days.

Corrosivity

Product: Not classified.

Potassium carbonate: No evidence of corrosion.

Sensitisation

Product: No specific test data are available. Sensitisation should not occur when used as recommended.

Potassium carbonate: Skin sensitisation, guinea pig: not sensitising

Repeated Dose Toxicity

Product: Not classified – lack of data.

Potassium carbonate: Not classified – lack of data.

Carcinogenicity

Product: No specific test data are available. There is no evidence that this product can cause cancer.

Potassium carbonate: No data available.

Germ Cell Mutagenicity:

Product: There is no evidence that this product has mutagenic properties.

Potassium carbonate: In vitro: this substance shows no evidence of mutagenicity.

In vivo: no data available.

Reproductive toxicity

Product: Does not contain any substances known to be toxic to reproduction.

Potassium carbonate: No data available.

General information:

This product is considered to be a low hazard under normal conditions of use.

12. Ecological information

12.1 Toxicity

Product: No data available. This product is not expected to be toxic to aquatic organisms.

12.2 Persistence and degradability

Biodegradation

Product: No data available.

Potassium carbonate: No data available.

12.3 Bioaccumulative potential

Bioaccumulation factor

Product: No data available.
Potassium carbonate: No data available.

12.4 Mobility in soil

Adsorption/Desorption

Product: No data available.
Potassium carbonate: No data available.

12.5 Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

13. Disposal considerations

Waste treatment methods

General information: Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Packaging disposal recommendations: Packaging should be disposed by landfill or incineration as appropriate, in accordance with relevant regulations. Do not remove the label from the packaging unless the packaging has been thoroughly cleaned.
Sewage disposal recommendations: Keep out of sewers and waterways.
Waste disposal recommendations: Place in an appropriate container and dispose of in a safe way.

14. Transport information

General: The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
UN Number: Not applicable.
UN proper shipping name: Not applicable.
Transport hazard class(es): No transport warning sign required.
Packing group: Not applicable.
Environmental hazards: This product is not environmentally hazardous according to the criteria of the UN Model Regulations, nor is it a marine pollutant according to the IMDG Code.
Special precautions for user: Not applicable.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

15. Regulatory information

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

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16th 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.

16. Other information

The information in the safety document applies only to the specific product detailed in Section 1 and is not necessarily correct for use with other chemicals/products.

The product information in this data sheet is, to the best knowledge of Angus Horticulture Ltd., correct at the date of publication.

The Manufacturer or Supplier does not accept liability for any loss or damage resulting from reliance on this information. Final determination of the suitability of any product is the responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, it cannot be guaranteed that these are the only hazards that exist.