



Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product Name: Powergrow - Tomato Food
Product Number(s): G60081 (1L), G60082 (2L), G60083 (4L)

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

Tomato Food

1.3 Details of the supplier of the safety data sheet

Hygeia Chemicals Limited, Carrowmoneash, Oranmore, Co. Galway
Tel: 091-794722
email: info@hygeia.ie

1.4 Emergency telephone number

National Poisons Information Centre (Tel: 01-8379964) (Fax: 01-8368476)

Section 2: Hazards Identification

2.1 Classification according to Regulation (EC) 1272/2008 [EU-GHS/CLP]

Not a hazardous substance or mixture according to Regulation (EC) 1272/2008

2.2 Label Elements

Labelling according to Regulation (EC) No 1272/2008 (CLP):

Hazard pictogram: None
Signal words: None
Hazard statements: Not classified
Precautionary statements: P101: If medical advice is needed, have product container or label at hand
P102: Keep out of reach of children
P103: Read label before use
P501: Dispose of contents/container in a safe way

2.3 Other hazards

Not available

Section 3: Composition/information on ingredients

3.1 Substances

Not available

3.2 Mixtures

Name	No.	Classification	% Wt.
Ammonium Nitrate	CAS No: 6484-52-2 EINECS: 229-347-8 REACH: 01-2119490981-27-0050	Ox. Sol. 3: H272; Eye Irrit. 2: H319	0 - 5%
Potassium Nitrate	CAS No: 7757-79-1 EINECS: 231-818-8 REACH: 01-2119488224-35-0017	Ox. Sol. 2: H272	0 - 5%

Section 4: First Aid Measures

4.1 Description of First Aid Measures

Eye Contact: If substance has got into the eyes, immediately wash out with plenty of water for at least 10 minutes maintaining eyelids open. Protect unharmed eye. Take care not to wash the chemical from one eye into the other. Obtain medical attention immediately (show this Safety Data Sheet)

Skin Contact: Remove contaminated clothing immediately. If skin contamination occurs wash immediately with plenty of clean, gently flowing water for at least 10 minutes. Repeat skin decontamination process until all signs of chemicals have gone.

Ingestion: If ingestion is suspected, do not induce vomiting. If conscious, drink plenty of water. Obtain medical attention immediately (show this Safety Data Sheet)

Inhalation: Move to fresh air. If there is breathing difficulty or coughing, keep patient at rest seated in position of maximum comfort. Obtain medical attention immediately (show this Safety Data Sheet)

4.2 Most important symptoms and effects, both acute and delayed

Ingestion may provoke the following symptoms: Methaemoglobinemia

4.3 Indication of any immediate medical attention and special treatment needed

Not available

Section 5: Firefighting Measures

5.1 Extinguishing media

Extinguish with water

5.2 Special hazards arising from the substance or mixture

At temperatures above 130°C, dangerous decomposition gases can be emitted: Nitrogen Monoxide, Nitrogen Dioxide, Dinitrogenoxide, Ammonia

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing (see section 8). Keep product away from children

6.2 Environmental precautions

Do not empty into drains. Retain and dispose of contaminated wash water

6.3 Methods and material for containment and cleaning up

Soak up with inert absorbent material and dispose of according to local regulations

- 6.4 Reference to other sections**
For personal protection see Section 8

Section 7: Handling and Storage

- 7.1 Precautions for safe handling**
Open container with care to avoid splashes. When using product to not eat, drink or smoke. Protect from contamination, direct sunlight, heat and moisture. This product may be incombustible. It can lower the ignition temperature of combustible substances. Keep away from heat and sources of ignition.
- 7.2 Conditions for safe storage, including any incompatibilities**
Keep away from heat. Keep away from sources of ignition and combustible material. Avoid contamination. Store away from other substances
- 7.3 Specific end use(s)**
Consult label

Section 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Ammonium Nitrate

DNEL End Use: Workers
 Exposure Routes: Inhalation
 Potential Health Effects: Specific effects
 Exposure time: 1 day
 Value: 37,6 mg/m³

 End Use: Workers
 Exposure Routes: Skin contact
 Potential Health Effects: Specific effects
 Exposure time: 1 day
 Value: 21,3 mg/kg

 End Use: Consumers
 Exposure Routes: Ingestion
 Potential Health Effects: Specific effects
 Exposure time: 1 day
 Value: 12,8 mg/kg

 End Use: Consumers
 Exposure Routes: Inhalation
 Potential Health Effects: Specific effects
 Exposure time: 1 day
 Value: 11,1 mg/m³

PNEC Fresh Water
 Value: 0,45 mg/l

 Marine Water
 Value: 0,045 mg/l

 Ceiling Limit Value
 Value: 4,5 mg/l

Potassium Nitrate

DNEL End Use: Workers
Exposure Routes: Inhalation
Potential Health Effects: Systemic effects
Value: 37,6 mg/m³

End Use: Workers
Exposure Routes: Skin contact
Potential Health Effects: Systemic effects
Exposure time: 1 day
Value: 20,8 mg/kg

End Use: Consumers
Exposure Routes: Ingestion
Potential Health Effects: Systemic effects
Exposure time: 1 day
Value: 12,5 mg/kg

End Use: Consumers
Exposure Routes: Skin contact
Potential Health Effects: Systemic effects
Exposure time: 1 day
Value: 12,5 mg/kg

PNEC Fresh Water
Value: 0,45 mg/l

Marine Water
Value: 0,045 mg/l

Ceiling Limit Value
Value: 4,5 mg/l

8.2 Exposure Controls

Personal Protective Equipment

Respiratory Protection: Breathing apparatus only if aerosol or dust is formed
Particle filter EN 143. Type P1, low efficiency

Hygiene Measures: Wash hands and exposed skin after use

Environmental Exposure Controls

General Advice: Do not empty into drains

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Green Liquid
Odour: Almost odourless
pH: 4.0 (typical)
Boiling Point/Range: Not specified

Flash Point/Flammability:	Not classified as flammable
Explosive Properties:	Not classified as explosive
Oxidising Properties:	Potassium Nitrate is an oxidizer
Vapour Pressure:	Not specified
Relative Density:	1.144 g/ml (typical) @ 20°C
Solubility:	Soluble in water
Partition Coefficient:	Not specified
Viscosity:	Not specified
Vapour Density:	Not specified
Evaporation Rate:	Not specified

9.2 Other information
Not Available

Section 10: Stability and Reactivity

- 10.1 Reactivity**
Stable under recommended storage conditions
- 10.2 Chemical stability**
No decomposition if stored and applied as directed. Decomposes on heating
- 10.3 Possibility of hazardous reactions**
Evolution of ammonia under influence of alkalies
- 10.4 Conditions to avoid**
Keep away from heat and sources of ignition
- 10.5 Incompatible materials**
Avoid sulphur, chlorites, chloride, chlorates, Hypochlorites, acid or alkaline reacting substances, flammable oxidizable substances, flammable ozidizable substances, nitrites, metallic salts, metallic powder, herbicide, chlorinated hydrocarbons, organic compounds
- 10.6 Hazardous decomposition products**
Nitrogen monoxide, nitrogen dioxide, dinitrogenoxide, ammonia

Section 11: Toxicological Information

11.1 Information on toxicological effects

Product

Acute Oral Toxicity:	LD ₅₀ : >2.000 mg/kg, Rat
Skin Corrosion/Irritation:	Rabbit, Result: non-irritant, OECD Test Guideline 404
Serious Eye Damage/Eye Irritation:	Rabbit, Result: non-irritant, OECD Test Guideline 405
Further Information:	The product was not tested. The statement was derived from products of similar structure and composition

Components:

Ammonium Nitrate

Acute Oral Toxicity:	LD ₅₀ : >2.950 mg/kg, Rat, OECD Test Guideline 401
Acute Inhalation Toxicity:	>88,8 mg/l, No information available. Not relevant because of low vapour pressure. Not relevant because of low dust formation
Acute Dermal Toxicity:	LD ₅₀ : >5.000 mg/kg, Rat, OECD Test Guideline 402
Skin Corrosion/Irritation:	Rabbit, Result: non-irritant, OECD Test Guideline 404
Serious Eye Damage/Eye	Rabbit, Result: irritant, OECD Test Guideline 405

Irritation:

Respiratory or Skin Sensitization:	Result: Does not cause skin sensitization
Germ Cell Mutagenicity	
Genotoxicity in vitro:	Result: negative, OECD Test Guideline 471
STOT - Repeated Exposure:	Rat, Oral, Exposure time: 28 d, NOAEL: >1.500 mg/kg
STOT - Repeated Exposure:	Rat, Oral, Exposure time: 52 w, NOAEL: =256 mg/kg, OECD Test Guideline 453
STOT - Repeated Exposure:	Rat, by inhalation, Exposure time: 2 w, NOAEL: >=185 mg/kg, Repeated Dose Inhalation Toxicity: 28-day or 14-day Study

Potassium Nitrate

Acute Oral Toxicity:	LD ₅₀ : >2.000 mg/kg, Rat
Acute Inhalation Toxicity:	LC ₅₀ : >0,527 mg/l, Rat
Acute Dermal Toxicity:	LD ₅₀ : >5.000 mg/kg, Rat
Skin Corrosion/Irritation:	Rabbit, Result: no skin irritation
Serious Eye Damage/Eye Irritation:	Rabbit, Result: no eye irritation
STOT - Repeated Exposure:	Rat, 1 day, NOAEL: >1.500 mg/kg

Section 12: Ecological Information

12.1 Toxicity

Product

Toxicity to Fish:	LC ₅₀ : 422 mg/l, 48h, Cyprinus sp., static test
Toxicity to Daphnia and Aquatic Invertebrates:	EC ₅₀ : 555 mg/l, 48h, Daphnia, static test
Toxicity to Algae:	No observed effect concentration: 83 mg/l, 168h, green algae, other, no data available
Toxicity to Bacteria:	EC ₂₀ : ca. 850 mg/l, 0.5h, activated sludge, other, no data available Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations

Components:

Ammonium Nitrate

Toxicity to Fish:	LC ₅₀ : 100 mg/l, 96h, various species
Toxicity to Daphnia and Aquatic Invertebrates:	EC ₅₀ : 490 mg/l LC ₅₀ : 490 mg/l
Toxicity to Algae:	EC ₅₀ : 1.700 mg/l, other aquatic plant

Potassium Nitrate

Toxicity to Fish:	LC ₅₀ : 100 mg/l, 96h, various species
Toxicity to Daphnia and Aquatic Invertebrates:	EC ₅₀ : 490 mg/l, 48h, Daphnia magna (Water flea)
Toxicity to Algae:	LC ₅₀ : >=1.700 mg/l, 10 day

12.2 Persistence & Degradability

Components:

Ammonium Nitrate

The methods for determining the biological degradability are not applicable to inorganic substances

Potassium Nitrate

The methods for determining the biological degradability are not applicable to inorganic substances

12.3 Bioaccumulative Potential

Product

Bioaccumulation is unlikely

Components:

Ammonium Nitrate

Bioaccumulation is unlikely

Potassium Nitrate

Does not bioaccumulate

12.4 Mobility

Product

Mobility: Groundwater contamination is unlikely

Distribution among environmental compartments: No data available

12.5 Results of PBT and vPvB assessment

Product

No data available

12.6 Other Adverse Effects

Product

There is a high probability that the product is acute not harmful to aquatic organisms. Additional ecological information: The product has not been tested. The information is derived from the properties of the individual components. At higher pH values, which can be found in natural surface waters, an increase of toxic effects on aquatic organisms may be expected

Section 13: Disposal Considerations

13.1 Waste treatment methods

Product Disposal: Dispose of according to local and national regulations

Container Disposal: Triple rinse containers with water and dispose of according to local and national regulations

Section 14: Transport Information

Not classified as Hazardous for Road Transport

14.1 UN number

14.2 UN proper shipping name

14.3 Transport hazard class(es)

14.4 Packing group

14.5 Environmental hazards

14.6 Special precautions for user

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

Section 15: Regulatory Information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Water Contaminating Class: WGK 1 slightly endangering
(Germany)

Other Regulations: TRGS 511 'Ammonium Nitrate'

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance

Section 16: Other Information**Text of Phrases mentioned in Sections 2 and 3:****H-Statements**

H272 May intensify fire; oxidiser

H319 Causes serious eye irritation

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, release and is not to be considered a warranty of quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.