

Date: 4th April 2019

Version: 01

Revision number: n/a Supersedes: n/a

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

1.1 Product Identifier: Sinclair Clarity Select 3-1-3

Product code: F1500170S

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

Supplied for use as a horticultural growing medium.

1.3 Details of the supplier of the safety data sheet:

Westland Horticulture Ltd Bridges Road Ellesmere Port Cheshire CH65 4LB

Sinclair is a subsidiary of Westland Horticulture Ltd

Telephone Number: 0151 356 6014 (09:00 to 17:00)

E-mail Address: sales@sinclairpro.com

1.4 Emergency telephone number: 0151 356 6014 (09:00 to 17:00)

2. Hazards Identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

Oxidising Solid category 3 H272 May intensify fire; oxidiser. Eye Irritation category 2 H319 Causes serious eye irritation.

2.2 Label Elements according to Regulation (EC) No 1272/2008 [CLP]

Sinclair Clarity Select 3-1-3

Pictograms:





Signal word: Warning

Hazard Statements:

H272 May intensify fire; oxidiser.H319 Causes serious eye irritation.

Precautionary Statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P220 Store away from clothing and combustible materials.

P280 Wear eye 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.

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

P370 + P378 In case of fire: Use flooding quantities of water to extinguish.



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P501 Dispose of contents/container to in accordance with local/national/international regulations.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be PBT or vPvB.

3. Composition/information on ingredients

3.2 Mixtures

Hazardous components

Name:	CAS/ EC No.	Index No./REACh Registration No.	Pictogram(s) according to 1272/2008:	H-phrase(s) according to 1272/2008:	Conc. [% w/w]
Potassium nitrate	7757-79-1/ 231-818-8	-/ 01-2119488224- 35	GHS03	Ox. Sol. 3, H272	≥ 30 - < 35
Ammonium nitrate	6484-52-2/ 229-347-8	-/ 01-2119490981- 27	GHS03 GHS07	Ox. Sol. 3, H272 Eye Irrit. 2, H319	≥ 15 - < 20
Potassium pentahydrogen bis(phosphate)	14887-42- 4/ 238-961-5	-/ 01-2119510125- 56	GHS07	Eye Irrit. 2, H319	≥ 10 - <12.5
Citric acid	77-92-9/ 201-069-1	-/ 01-2119457026- 42	GHS07	Eye Irrit. 2, H319	≥ 5 - <7
Boric acid	10043-35- 3/ 233-139-2	005-007-00-2/ 01-2119486683- 25	GHS08	Repr. 1B, H360FD (Fertility, Unborn child)	≥ 0.1 - < 0.2

The full text for all H-Phrases if not displayed in section 2 or 3 are displayed in Section 16.

4.0. First Aid Measures

4.1 Description of first aid measures

Eye contact

Rinse with plenty of running water. Check for and remove any contact lenses. If irritation persists, get medical attention.

Inhalation

If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.



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Skin contact

Wash with soap and water. Get medical attention if irritation develops.

Ingestion

Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.

Protection of first-aiders:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects:

Eye contact: Causes serious eye irritation.

Inhalation: Exposure to decomposition products may cause a health hazard.

Serious effects may be delayed following exposure.

Skin contact: No known significant effects or critical hazards.

Ingestion: Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms:

Eye contact: Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation: No specific data.
Skin contact: No specific data.
Ingestion: No specific data

4.3 Indications of any immediate medical attention and special treatment needed Notes to physician:

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

5. Fire-Fighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Use flooding quantities of water for extinction.

Unsuitable extinguishing media:

Do NOT use chemical extinguisher or foam or attempt to smother the fire with steam or sand.

5.2 Special hazards arising from the substance or mixture Hazards from the substance or mixture:

Oxidizing material. May intensify fire. The product itself is not combustible but it can support combustion, even in absence of air. On heating it melts and further heating can cause decomposition, releasing toxic fumes containing nitrogen oxides and ammonia. It has high resistance to detonation. Heating under strong confinement can lead to explosive behaviour.

Hazardous thermal decomposition products:

Decomposition products may include the following materials: carbon dioxide



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carbon monoxide nitrogen oxides sulfur oxides ammonia

Avoid breathing dusts, vapors or fumes from burning materials.

In case of inhalation of decomposition products in a fire, symptoms may be delayed.

5.3 Advice for firefighters

Special precautions for fire-fighters:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Additional information: None

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures For non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up Small spill:

reactive chemicals, use spark-proof tools and explosion-proof equipment.

Move containers from spill area. If contaminated with combustible material or reactive chemicals, use spark-proof tools and explosion-proof equipment. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal.

Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill:

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. If contaminated with combustible material or

6.4 Reference to other sections

Note: see SECTION 1 for emergency contact information, SECTION 8 for personal protection and section 13 for waste disposal.



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7. Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precaution for safe handling

Protective measures:

Put on appropriate personal protective equipment (see Section 8).

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. Keep away from clothing, incompatible materials and combustible materials. Keep away from heat. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene:

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities Recommendations:

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. Separate from reducing agents and combustible materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Keep away from: organic materials, oil and grease.

<u>Seveso Directive - Reporting thresholds</u> Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
Potassium nitrate	1250 tonnes	5000 tonnes

7.3 Specific end use(s)

For use as a horticultural growing medium.

8.Exposure controls/personal protection

8.1 Control Parameters

Occupational exposure limits

Remark: No exposure limit value known.

Recommended monitoring procedures:

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents)



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Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
Boric acid	DNEL	Long term inhalation	8.3 mg/m ³	Workers	Systemic
Boric acid	DNEL	Long term dermal	392 mg/Kg bw/day	Workers	Systemic
Ammonium nitrate	DNEL	Long term dermal	21.3 mg/Kg bw/day	Workers	Systemic
Ammonium nitrate	DNEL	Long term inhalation	37.6 mg/m ³	Workers	Systemic
Potassium nitrate	DNEL	Long term dermal	20.8 mg/Kg bw/day	Workers	Systemic
Potassium nitrate	DNEL	Long term inhalation	36.7 mg/Kg bw/day	Workers	Systemic
Potassium nitrate	DNEL	Long term dermal	12.5 mg/Kg bw/day	Consumers	Systemic
Potassium nitrate	DNEL	Long term inhalation	10.9 mg/m ³	Consumers	Systemic
Potassium nitrate	DNEL	Long term Oral	12.5 mg/Kg bw/day	Consumers	Systemic

PNECs

Product/ingredient name	Туре	Compartment Detail	Value	Method Detail
Ammonium nitrate	PNEC	Fresh water	0.45 mg/l	Assessment Factors
Ammonium nitrate	PNEC	Marine water	0.045 mg/l	Assessment Factors
Ammonium nitrate	PNEC	Intermittent release	4.5 mg/l	Assessment Factors
Ammonium nitrate	PNEC	Sewage Treatment Plant	18 mg/l	Assessment Factors
Potassium nitrate	PNEC	Marine	0.045 mg/l	Assessment Factors
Potassium nitrate	PNEC	Intermittent release	4.5 mg/l	Assessment Factors
Potassium nitrate	PNEC	Sewage Treatment Plant	18 mg/l	Assessment Factors
Potassium nitrate	PNEC	Fresh water	0.45 mg/l	Assessment Factors

8.2 Exposure controls

Appropriate engineering controls:

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures:

A washing facility or water for eye and skin cleaning purposes should be present.

Eye/face protection:



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Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Recommended: Tightly-fitting goggles CEN: EN166.

Skin protection

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. For general applications, we recommend gloves with a thickness typically greater than 0.35 mm. It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. > 8 hours (breakthrough time): Protective gloves should be worn under normal conditions of use.

Body protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved.

Other skin protection:

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Recommended: Filter P2 (EN 143)

Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Solid

Physical state at 20°C: Not determined.

Odour: Not determined.

Odour threshold: Not determined.

pH: Not determined.

Melting Point: Not determined.
Boiling point: Not determined.
Freezing point: Not applicable
Flash point: Not applicable
Evaporation rate: Not applicable
Flammability: Not flammable
Explosion limits Not determined.
Vapour pressure: Not determined.
Vapour density: Not determined.
Bulk density: Not determined.
Solubility: Not determined.

Partition coefficient: n-octanol/water Not determined.

Auto-ignition temperature: Not determined. Decomposition temperature: Not determined.

Viscosity: Not determined.

Explosive properties: Not determined.

Oxidising properties: Oxidiser



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9.2 Other Information

No additional information available

10. Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

Stable under normal conditions of storage, handling and use

10.3 Possibility of hazardous reactions

Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include the following: contact with combustible materials

Reactions may include the following: risk of causing or intensifying fire

10.4 Conditions to avoid

Avoid contamination by any source including metals, dust and organic materials.

10.5 Incompatible materials

Reactive or incompatible with the following materials: alkalis combustible materials reducing materials organic materials acids

10.6 Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

Product / ingredient name	Result	Species	Dose	Exposure	References
Boric acid					
	LD50 Oral	Rat	3,450 mg/Kg	Not applicable	IUCLID 5
	LD50 Dermal	Rabbit	> 2,000 mg/Kg	Not applicable	IUCLID 5
Citric acid					
	LD50 Oral	Rat	5,790 mg/Kg	Not applicable	
Ammonium nitr	ate				
	LD50 Oral	Rat	2,950 mg/Kg OECD 401	Not applicable	IUCLID 5
	LD50 Dermal	Rat	> 5,000 mg/Kg OECD 402	Not applicable	IUCLID 5
Potassium nitra	Potassium nitrate				
	LD50 Oral	Rat	> 2,000 mg/Kg	Not applicable	IUCLID 5
	LD50 Dermal	Rat	> 5,000 mg/Kg	Not applicable	IUCLID 5

Conclusion/Summary:

No known significant effects or critical hazards

Irritation/Corrosion



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Product / ingredient name	Result	Species		Exposure	Observation	References
Citric acid	Skin – Mild irritant	Rabbit	Not applicable		Not applicable	
	Eyes – Severe irritant	Rabbit	Not applicable		Not applicable	
Potassium pentahydrogen bis(phosphate)	Eyes – Severe irritant	Rabbit	Not applicable		Not applicable	IUCLID 5
Ammonium nitrate	Eyes – irritant OECD 405	Rabbit	Not applicable		Not applicable	IUCLID 5
Potassium nitrate	Skin – Non- irritating OECD 404	Rabbit	0		72 h	IUCLID

Conclusion/Summary

Skin: No known significant effects or critical hazards.

Eyes: Causes serious eye irritation.

Respiratory: No known significant effects or critical hazards.

<u>Sensitization</u>

Conclusion/Summary

Skin: No known significant effects or critical hazards. Respiratory: No known significant effects or critical hazards.

Mutagenicity

Conclusion/Summary: No known significant effects or critical hazards.

<u>Carcinogenicity</u>

Conclusion/Summary: No known significant effects or critical hazards.

Reproductive toxicity

Product / ingredient name	Maternal toxicity	Fertility	Develop- ment toxin	Species	Dose	Exposure	References
Boric acid	Not applicable	Positive	Not applicable	Rat	Oral	3 weeks Repeated dose	IUCLID 5
Ammonium nitrate	Not applicable	Negative	Negative	Rat	Oral: > 1500 mg/kg bw/day OECD 422	28 days	IUCLID 5
Potassium nitrate	Negative	Negative	Negative	Rat	Oral: > 1500 mg/kg bw/day OECD 422	28 days	IUCLID 5



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Conclusion/Summary:

No known significant effects or critical hazards.

Teratogenicity

Conclusion/Summary: No known significant effects or critical hazards. **Information on the likely routes of exposure:** No known significant effects or critical hazards.

Potential acute health effects

Inhalation: Exposure to decomposition products may cause a health hazard. Serious

effects may be delayed following exposure.

Ingestion: Irritating to mouth, throat and stomach.

Skin contact: No known significant effects or critical hazards.

Eye contact: Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:
Ingestion:
Skin contact:
No specific data.
No specific data.
No specific data.

Eye contact: Adverse symptoms may include the following: pain or irritation watering

redness

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects: No known significant effects or critical hazards. Potential delayed effects: No known significant effects or critical hazards.

Long term exposure

Potential immediate effects: No known significant effects or critical hazards. Potential delayed effects: No known significant effects or critical hazards.

Potential chronic health effects

Product / ingredient name	Result	Species	Dose	Exposure	References
Ammonium nitrate	Chronic NOAEL Oral	Rat	256 mg/kg OECD 422	28 days	IUCLID 5
	Sub-acute No- observable- effect concentration Dusts and mists Inhalation	Rat	> 185 mg/kg OECD 412	2 weeks 5 hours per day	IUCLID 5
Potassium nitrate	Sub-acute NOAEL Oral	Rat	> 1,500 mg/kg	28 days	IUCLID 5

Conclusion/Summary:

No known significant effects or critical hazards.

No known significant effects or critical hazards.

Carcinogenicity:
No known significant effects or critical hazards.

Mutagenicity:
No known significant effects or critical hazards.

Teratogenicity:
No known significant effects or critical hazards.

No known significant effects or critical hazards.

Developmental effects:
No known significant effects or critical hazards.

Fertility effects:
No known significant effects or critical hazards.



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12. Ecological Information

12.1 Toxicity

Product /	Result	Species	Exposure	References
ingredient name		•		
Boric acid				·
	Acute LC50 >	Fish	4 d	IUCLID
	100 mg/l Fresh			
	water			
	Acute EC50 >	Water flea	2 d	IUCLID
	100 mg/l Fresh			
	water			
Citric acid		_		
	Acute LC50 440	Fish	48 h	
	mg/l Fresh water			
	Acute LC50 >	Fish	96 h	
	100 mg/l Fresh			
	water			
Ammonium nitrate	T	T	T	1 =
	Acute LC50 447	Fish	48 h	IUCLID 5
	mg/l Fresh water			
	Acute EC50 490	Daphnia	48 h	IUCLID 5
	mg/l Fresh water			
	Acute EC50	Algae	10 d	IUCLID 5
	1,700 mg/l Salt			
D	water			
Potassium nitrate		T		1
	Acute LC50	Fish	96 h	IUCLID 5
	1,378 mg/l Fresh			
	water OECD 203	<u> </u>	40.1	
	Acute EC50 490	Daphnia	48 h	IUCLID 5
	mg/l Fresh water	A.	0.40.1	
	Acute EC50 >	Algae	240 h	IUCLID 5
	1,700 mg/l Fresh			
	water			

Conclusion/Summary: No known significant effects or critical hazards.

12.2 Persistence and degradability

Conclusion/Summary: No known significant effects or critical hazards.

Product / ingredient	Aquatic half-life	Photolysis	Biodegradability
name			
Ammonium nitrate			
	Not applicable	Not applicable	Not relevant for
			inorganic
			substances.

12.3 Bioaccumulative potential

Product / ingredient	Log PoW	BCF	Potential
name			
Boric acid	0.175-1.09	Not applicable	low
Citric acid	- 1.64 – 1.8	Not applicable	low

Conclusion/Summary: No known significant effects or critical hazards.



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12.4 Mobility in soil

Soil/water partition coefficient (KOC): Not available. **Mobility:** Not available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

12.6 Other adverse effects

No known significant effects or critical hazards.

13.Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste Treatment Methods

Methods of disposal:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste: Yes. European waste catalogue (EWC)

Waste code:	Water designation:
16 09 04	Oxidising substances, not otherwise specified

Packaging:

Methods of disposal:

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Empty the bag by shaking to remove as much as possible of its contents. Empty bags may be disposed of as non-hazardous material or returned for recycling.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport Information 14.1 UN number: 1479

14.2 UN proper shipping name: OXIDIZING SOLID, N.O.S. (Potassium nitrate, Ammonium

nitrate)

14.3 Transport hazard: 5.1 14.4 Packing group: III

14.5 Environmental hazards: No

Additional information

Hazard identification number: 50 Tunnel code: (E)



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14.6 Special precautions for user: Transport within user's premises: Ensure that persons transporting the product know what to do in the event of an accident or spillage.
14.7 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.

This substance is classified and labelled in accordance with regulation 1272/2008 and 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.

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV: None of the components are listed.

<u>Substances of very high concern:</u> The following components are listed:

Ingredient name	Intrinsic property	Status	Reference number	Date of revision
boric acid	EU - Substances of very high concern - Toxic to reproduction	Candidate	ED/30/2010	2010-06-18

EU Regulation (EC) No. 1907/2006 (REACH) Annex XVII

Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:

Entry 58

Seveso Directive

This product is controlled under the Seveso Directive Potassium nitrate.

National regulations:

Product/ingredient name	Fertility effects:	
Boric acid	Repr. 1B, H360FD	
	(Fertility)	

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

16. Other Information

Abbreviations and acronyms:

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DNEL = Derived No Effect Level

DMEL = Derived Minimal Effect Level

EUH statement = CLP-specific Hazard statement

PNEC = Predicted No Effect Concentration

PBT = Persistent, Bioaccumulative and Toxic



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vPvB = Very Persistent and Very Bioaccumulative bw = Body weight

Key literature references	EU REACH IUCLID5 CSR.
and sources for data:	National Institute for Occupational Safety and Health, U.S. Dept. of Health, Education, and Welfare, Reports and Memoranda Registry of Toxic Effects of Chemical Substances. Sphera Solutions Inc., 4777 Levy Street, St Laurent, Quebec HAR 2P9, Canada. Regulation (EC) No 1272/2008 Annex VI.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008

[CLP/GHS]

Classification:	Justification:
Ox. Sol. 3, H272	Expert judgement
Eye Irrit. 2, H319	Calculation method

Full text of abbreviated H: H272 May intensify fire; oxidizer.

statements H319 Causes serious eye irritation.

H360FD (Fertility, Unborn child) May damage fertility. May

damage the unborn child.

Full text of classifications:

[CLP/GHS]

Ox. Sol. 3, H272: OXIDIZING SOLIDS - Category 3 Eye Dam./Irrit. 2, H319: SERIOUS EYE DAMAGE/ EYE

IRRITATION - Category 2

Repr. 1B, H360FD (Fertility, Unborn child): TOXIC TO REPRODUCTION (Fertility, Unborn child) - Category 1B

SDS information:

This safety data sheet is compiled using data submitted for raw materials and practical experience.

This Safety Data Sheet is prepared in compliance with regulation 1272/2008 and 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.

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