

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Trade Name	PHORCE
Chemical Name/Class	Inorganic Salt Mixture
Product Number	5-38-15
Product Use	Fertilizer
Manufacturer/Supplier	PlantSyence Ltd
Address	Keepers Cottage Brind East Yorks DN14 7LA
Emergency Telephone Number	CHEMTREC: 1-800-424-9300
Business Phone:	0(0 44) 1430 431810
Fax Number	0(0 44) 1430 431820

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS No	Conc %w/w	Symbol & R Phrases
Potassium Phosphite	13492-26-7	>10	Xn R22, Xi R36/37
Ammonium Phosphite	13446-12-3	>10	Xn R22, Xi R36/37
Potassium Citrate	00866-84-2	>1	Xn R22, Xi R36/37

The full text for all R-phrases are shown in Section 16

3. HAZARDS IDENTIFICATION

Health	Harmful if swallowed Irritating to eyes and skin Irritating to mucosal membranes if inhaled
Environmental	None.
Physico-Chemical	None

4. FIRST-AID MEASURES

Eye Contact	If this product enters the eyes, open the contaminated individual's eyes while under gentle running water. Use sufficient force to open eyelids. Have the contaminated individual "roll" eyes. Minimum flushing is for 15 minutes.
Skin Contact	If the product contaminates the skin, decontaminate the affected area with running water. The minimum recommended flushing time is at least 15 minutes, especially if adverse skin reactions occur. If necessary, remove exposed or contaminated clothing, taking care not to contaminate eyes.
Inhalation	If mists or sprays of this product are inhaled, remove the contaminated individual to fresh air. If necessary, use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers.
Ingestion	If product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTRE FOR MOST CURRENT INFORMATION. If professional advice is not available, do not induce vomiting. Victim should drink milk, egg whites, or large quantities of water. Never induce vomiting or give diluents (milk or water) to someone who is <u>unconscious, having convulsions or unable to swallow.</u>

5. FIRE-FIGHTING MEASURES

Extinguishing Media	Water spray, foam, carbon dioxide or dry powder
Unsuitable Extinguishing Media	Water Jets
Special Exposure Hazards	When involved in a fire and exposed to extremely high temperatures, the components of this product will decompose to produce irritating vapours and toxic gases (e.g.: phosphorous oxides, phosphine, carbon monoxide and carbon dioxide.)
PPE for Fire Fighting	Do not breathe fumes. Wear self-contained breathing apparatus and eye/face protection.
Fire Fighting Guidance	If possible and without risk, remove unopened containers from exposure to fire. Otherwise, spray unopened containers

with water to keep cool. Do not let fire-fighting water contaminate drains or watercourses.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with spilled material or contaminated surfaces. Wear protective clothing as described in Section 8. Whilst dealing with the spillage do not eat, drink or smoke.
Environmental Precautions	Keep people and animals away. Prevent entry into drains , sewers and watercourses (inform the Environmental Agency if this occurs)
Spillages	Contain/absorb spillage in sand/earth or in a suitable inert material. Collect using a non-sparking shovel and place in a plastic/steel drum in a well-ventilated place for subsequent safe disposal (see Section 13).

7. HANDLING AND STORAGE

Handling	No specific precautions when handling unopened containers; follow any manual handling guidance. Refer to Section 8 if exposure to product is possible. Wash thoroughly with soap and water after handling and before eating, drinking or smoking.
Storage	Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from incompatible materials (see section 10 – stability and reactivity). Keep container tightly closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls	Wherever possible exposure to mists/sprays should be eliminated or minimised using appropriate engineering controls such as physical containment and good ventilation. Eyewash stations/safety showers should be nearby use areas.
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Occupational Exposure Standard: None Known

Respiratory Protection	Normally not required but ensure good ventilation.
Body Protection	Wear chemical resistant non-absorbent overalls.
Hand Protection	Wear chemical resistant nitrile gloves and change regularly.
Eye Protection	Wear goggles with side protection or visor.

- Note (1) Some of the protective equipment may be inappropriate when very small quantities are involved – obtain expert advice before disregarding.
- Note (2) Refer also to any COSHH assessment made for this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solution	Boiling Range/Point (°C)	> 230° F
Colour	Water Clear	Melting Point (°F)	N/A
Odour	Faint	Flash Point (°C)	N/A
PH (10% solution)	6.5	Solubility in Water:	Complete
Density (gr/cc)	1.47		

10. STABILITY AND REACTIVITY

Stability Stable in normal conditions.

Decomposition Products When exposed to extremely high temperatures, the components of this product will decompose to produce irritating vapours and toxic gases (e.g.: phosphorous oxides, phosphine, carbon monoxide and carbon dioxide.)

Conditions to Avoid Exposure to extreme temperatures and incompatible materials.

Materials to Avoid Strong bases, strong oxidisers and strong reducers.

11. TOXICOLOGICAL INFORMATION

- ACUTE TOXICITY**

Inhalation May cause slight irritation to upper respiratory tract.

Skin and Eye Contact Irritating to eyes and skin

Ingestion. Harmful if swallowed

- CHRONIC TOXICITY**

Carcinogenicity No

Mutagenicity No

Reprotoxicity No

12. ECOLOGICAL INFORMATION

Degradability No Data Available

Bio-accumulation No Data Available

Aquatic Toxicity No Data Available

Effect of Material on Plants or Animals This product is a fertilizer. Releases of large quantities into an area can substantially alter the nutrient composition and affect terrestrial plant life.

Effect of Chemical on Aquatic Life This product is a fertilizer. Releases of large quantities into a body of water can substantially alter the nutrient composition and affect aquatic plant and animal life.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of at a licensed waste disposal site capable of accepting chemical waste in compliance with local regulations, if re-use is not possible.

Container Disposal If recycling is not practicable, dispose of in compliance with the European Waste Catalogue. Labels should not be removed from containers until they have been cleaned. Empty containers may contain hazardous residues. Ensure conformance with local and national regulations.

14. TRANSPORT INFORMATION

ADR/RID Not classified as dangerous for transport.

CDG-CPL Not classified as dangerous for transport.

IMDG/IMO Not classified as dangerous for transport.

IATA/ICAO Not classified as dangerous for transport.

15. REGULATORY INFORMATION



Hazard Symbols	Xn Harmful	
Designated Name	MAGNUM 38	
Risk Phrases	R22	Harmful if swallowed
	R36	Irritating to eyes
	R37	Irritating to skin
Safety Phrases	S2	Keep out of the reach of children
	S23	Do not breathe vapour
	S24/25	Avoid contact with skin and eyes
	S26	In case of contact with eyes rinse immediately with plenty of water and seek medical advice.
	S28	Avoid contact with skin, wash immediately with plenty of soap and water
	S46	If swallowed seek medical advice immediately and show this container or label
UK Regulatory References:	Prepared in accordance with the Chemicals (Hazard Information & Packaging for Supply) Regulation 2002 (CHIP 3)	

16. OTHER INFORMATION

Date this safety data sheet officially generated 16/05/2005
Date this version generated
Revision(s)

R-Phrases (Full Text):	R22	Harmful if swallowed
	R36	Irritating to eyes
	R37	Irritating to skin

DISCLAIMER:

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