

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Product description: SL formulation of Dipotassium phosphate for management of Citrus black Spot

Dangerous ingredients: None

3. HAZARDS IDENTIFICATION

Important hazards: None

4. FIRST AID MEASURES

Symptoms and effects:

Inhalation: Slight irritant

Ingestion: After absorption of large quantities, feeling of weakness, nausea, vomiting.

Skin contact: Not a skin irritant.

Eye contact: Not an eye irritant.

General: In all cases of doubt, or when symptoms persist, seek medical attention.

Inhalation: Move to fresh air, rest, half upright position, loosen clothing. Oxygen or artificial respiration if there is difficulty in breathing. Seek medical advice if required.

Skin: Immediately flush skin with water while removing contaminated clothing. Wash with soap and water and cover skin with an emollient. Seek medical advice if irritation develops. Launder clothes before reuse

Eye: Rinse thoroughly with plenty of water. Remove contact lenses after 1-2 minutes and continue flushing for several additional minutes. Seek medical advice if irritation develops or symptoms persist.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention if you feel unwell.

Advice to physician: No known indication of immediate or special treatment. Symptomatic treatment is advised.

5. FIRE FIGHTING MEASURES

Extinguishing media: alcohol resistant foam, dry powder, carbon dioxide.

Unsuitable media: Water-jet.

Special exposure hazards Nature of decomposition products not known for the mixture but may contain potassium oxides.

Advice for fire-fighters: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Be sure to use an approved/certified respirator or equivalent.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

For non-emergency personnel:

Isolate area. Remove possible causes of ignition-do not smoke. Keep unnecessary and unprotected personnel from entering the area. Avoid inhalation, and contact with skin. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

For emergency responders:

Isolate area. Remove possible causes of ignition-do not smoke. Keep unnecessary and unprotected personnel from entering the area. Avoid inhalation, and contact with skin. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions:

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

Methods for cleaning up:

For small spills:

Contain spilled material if possible. Collect in suitable and properly labelled containers. Absorb with materials such as: sand, earth, vermiculite or diatomaceous earth.

For large spills:

Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in well labelled container for disposal according to local regulations.

Reference to other sections:

See section 7 for information on safe handling.
See section 8 for information on personal protection equipment.
See section 13 for information on disposal.

Additional information:

None know.

7. HANDLING AND STORAGE

Precautions for safe handling: 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. Do not get in eyes or on skin or clothing

Protective measures:

Observe directions on label and instructions for use.

Advice on general occupational hygiene:

Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

None known.

Specific end uses:

Use as directed.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Control parameters:

Occupational exposure limits (OEL): None known.
Biological exposure indices (BEI): None known
Additional exposure limits under the conditions of use: None known

Exposure control:

Appropriate engineering controls: None required.

Individual protection measures, such as personal protective equipment:

Hygiene measures:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection:

Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Hand protection:	Use chemical resistant gloves. Examples of preferred glove barrier materials include Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, Polyvinyl alcohol, Polyvinyl chloride.
Body protection:	Not required under normal use.
Respiratory protection:	For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.
Environment Exposure Controls:	None required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid (20 °C)
Colour:	Clear
Odour:	None
Odour threshold:	None
Boiling point/range:	Not applicable
Flash point:	Not applicable
Melting point:	Not applicable
Flammability:	Not applicable
Evaporation rate:	Not applicable
Ignition temperature:	Not applicable
Explosion limits:	Not applicable
Vapour pressure:	Not applicable
Vapour Density:	Not applicable
Specific gravity:	1.226
Decomposition temperature:	465 deg C
Bulk density:	1.226
Solubility in water:	Soluble
Solubility in other solvents:	Not determined
pH value:	9.2
n-Octanol/water:	Not applicable

10. STABILITY AND REACTIVITY

Reactivity:	Product is stable. No specific test data related to reactivity available for this product or its ingredients.
Chemical stability:	Min. 24 months shelf life if stored under recommended conditions.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	Not known.
Incompatible materials:	Not known.
Hazardous decomposition products:	Not known.

11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data:	No information available.
Method:	No information available.
Dosage:	No information available.
Routes of administration:	Inhalation and ingestion.
Results:	No information available.
Absorption:	No information available.
Distribution:	No information available.
Metabolism:	Phosphates are toxic because of their ability to sequester calcium. But are slowly and incompletely absorbed when ingested and seldom result in systemic effects. Furthermore, acute potassium poisoning by mouth is rare because large single doses usually induce vomiting and because of absence of pre-existing kidney damage potassium is readily excreted

Excretion:	In the absence of pre-existing kidney damage, large doses of potassium are excreted.
Information on toxicological effects:	
Acute toxicity:	Acute oral LD50 for female rats \geq 5000 mg/kg (tested result). Dermal LD50 rats (male and female) >2000 mg/kg (tested result).
Skin corrosion/irritation:	Not a skin irritant for rabbits (tested result).
Serious eye damage/irritation:	Not an eye irritant for rabbits (tested result).
Respiratory or skin sensitization:	slight irritant.
Germ cell mutagenicity:	No information available.
Carcinogenicity:	No information available.
Reproductive toxicity:	No information available.
STOT-single exposure:	No information available.
STOT-repeated exposure:	Not known to aggravate medical condition.
Aspiration hazard:	No information available.

12. ECOLOGICAL INFORMATION

Toxicity for:	
Fish:	LC50 (48 h) static system for <i>Leuciscus idus</i> >900mg/L.
Bees:	LD50 (48 h) <i>Apis indica</i> >100.0 μ g a.i./bee.
Ecology Air:	Not dangerous to the ozone layer (council regulation (EC) no 1005/2009) TA Luft klasse 5.2.1.
Persistence and degradability:	No information available.
Bioaccumulative potential:	No information available.
Mobility in soil:	No information available.
Results of PBT& vPvB assessment:	No information available.
Other adverse effects:	No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:	Treat as hazardous waste and dispose of in accordance with municipal, provincial and national regulations.
Product/ packaging disposal:	Recycle where possible. Treat as hazardous waste and dispose of in accordance with municipal, provincial and national regulations.

14. TRANSPORT INFORMATION

There are no transport regulations or restrictions for this product.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization:

Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

Relevant information regarding restrictions:

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP] and EU directives 67/548/EEC or EC 1999/45/EC

Other National regulations: None.

Chemical Safety Assessment carried out: No

16. OTHER INFORMATION

Indication of changes:	No changes first edition.
Relevant Classification and Hazard Statements:	Not hazardous.
Training instructions:	Use as per instruction on the label.
Further information:	

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and

safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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