



Product	Steadfast
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SAFETY DATA SHEET

Section 1 : IDENTIFICATION

Product identifier	STEADFAST
Other means of identification	794g/L Alkylaryl polyoxyethylene glycol phosphate ester plus other minor ingredients including i.propanol.
Recommended use and restrictions on use	Agricultural adjuvant for use in the following applications: <ul style="list-style-type: none">• acidifying agent• compatibility agent• surfactant• tank cleaning• cotton spindle cleaning• electrostatic, conventional, & callenberg type spray systems• anti-crusting agent for soils
Details of manufacturer	Growth Agriculture Pty Ltd. PO Box 444, Wee Waa, NSW 2388, Australia. Freecall 1800 440 438 Phone (02) 6795 3787 Fax (02) 6795 3707
Emergency phone number	1800 440 438 or Poisons Information Centre (Australia) 13 11 26 Poisons Information Centre (NZ) 0800 764 766

Section 2 : HAZARDS IDENTIFICATION

Classification of the hazardous chemical	Hazardous according to the criteria of Safe Work Australia [SWA] Australia (eye irritant, skin irritant). Not listed as a dangerous good according to the Australian Dangerous Goods [ADG] code 7 th edition.
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**Label elements, including
precautionary statements**

SKIN : Hazard Category: 2

Signal word: Warning.

Hazard Statement: H315 Causes skin irritation.

Precautionary statements:

P264 Wash affected skin thoroughly after handling.

P280 wear protective gloves.

P302+P352 If on skin: wash with plenty of soap and water.

P321 Specific treatment - see label.

P332+P313 if skin irritation occurs, get medical attention.

P362 Take off contaminated clothing and wash before reuse.

EYES : Hazard Category: 2A

Signal word: Warning.

Hazard statement: Causes serious eye irritation.

Precautionary statements:

P264 Wash affected skin thoroughly after handling.

P280 Wear eye protection or face 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 skin irritation occurs, get medical attention.

NOSE+THROAT : Hazard Category: 3

Signal word: Warning.

Hazard Statement: H335 May cause respiratory irritation.

Precautionary statements:

P261 Avoid breathing spray mist.

P271 use only outdoors or in a well-ventilated area.

P304+P340 IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing

P312 Call a poison centre or doctor if you feel unwell.

P403+P233 Store in a well ventilated place. Keep container tightly closed.

P405 store should be locked up.



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Other hazards which do not result in classification

Avoid breathing spray mist.
May irritate the eyes, nose, throat, and skin.

Section 3 : COMPOSITION AND INFORMATION ON INGREDIENTS

Identity of chemical ingredients	alkylaryl polyoxyethylene glycol phosphate ester (~80%) Other non-hazardous materials (~20%), including i.propanol.
CAS Number and other unique identifiers	51811-79-1 <i>alkylaryl polyoxyethylene glycol phosphate ester</i> 67-63-0 <i>Isopropanol</i>
Concentration of ingredients	794g/L Alkylaryl polyoxyethylene glycol phosphate ester Other non-hazardous materials (~20%), including i.propanol.

Section 4 : FIRST AID MEASURES

Description of necessary first aid measures

Inhalation: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Skin Contact: Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed. If in doubt obtain medical advice.

Eye Contact: Quickly and gently blot or brush away product. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water until the product is removed or until a few minutes after irritation has ceased, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical advice if irritation becomes painful or lasts more than a few minutes.

Ingestion: If product is swallowed or gets in mouth, wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or a healthcare professional.

Symptoms caused by exposure

Skin and eye irritation.

Medical attention and special treatment

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The contact numbers are in Section 1 in this SDS. Have this SDS with you when you call.



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Section 5 : FIRE FIGHTING MEASURES

Suitable extinguishing media	Carbon dioxide; dry chemical; protein foam; water mist.
Specific hazards arising from the chemical	None known.
Special protective equipment and precautions for fire fighters	Protective suit and breathing apparatus.

Section 6 : ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Wear full protective clothing including eye protection (safety glasses or goggles). If vapour cannot dissipate wear a respirator or breathing apparatus.
Environmental precautions	In the event of a major spill, prevent spillage from entering drains or water-courses.
Methods and materials for containment and cleaning up	<p>Stop any leak if safe to do so, and contain the spill. Absorb onto sand, vermiculite or other suitable absorbent material. If the spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Collect recoverable product and place into labelled containers for recycling or salvage, and dispose of promptly.</p> <p>Residues may be slippery on flooring.</p> <p>After spills, wash the area and prevent runoff from entering local drains. If a significant quantity of material enters drains, advise emergency services.</p>

NOTE : Please read the product label for additional information. Instructions on the label must take precedence over this SDS.

Section 7 : HANDLING & STORAGE

Precautions for safe handling	<p>Keep exposure to this product to a minimum, and minimise the quantities kept in work areas.</p> <p>Carefully read other sections of this SDS for details on personal protective measures, and make sure that those measures are followed. Also check the measures for storage.</p> <p>Avoid contact or contamination of product with incompatible materials (if any) listed in this SDS.</p>
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Conditions for safe storage, including any incompatibilities

Store packages of this product in a cool, dry and well-ventilated place out of direct sunlight. Store the product in the original package.

Avoid contact or contamination of product with incompatible materials (if any) listed in this SDS.

***NOTE :** Please read the product label for additional information. Instructions on the label must take precedence over this SDS.*

Section 8 : EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters – exposure standards, biological monitoring

Use in a cool, well-ventilated space.

No data is available in literature for an acceptable time-weighted average [TWA] exposure concentration (over an 8 hour work shift) for this product.

No data is available in literature for a short term exposure limit [STEL] for this product.

Given the lack of exposure limit data and the likely low toxicity as vapour, no recommendations can be provided on biological monitoring.

Appropriate engineering controls

Use in a cool, well-ventilated space. Have spillage kits available on site.

Personal protective equipment (PPE)

For routine use, have eye protection available in the form of safety glasses, goggles or a face mask. The use of gloves is optional as no special risk is evident. If substantial skin contact occurs, wash with clean water.

Section 9 : PHYSICAL & CHEMICAL PROPERTIES

Appearance

Clear liquid.

Odour

Mild characteristic odour.

Odour threshold

No data available.

pH

Mildly acidic when in contact with water.

Melting point/Freezing point

No data.

Boiling point and boiling range

No data.

Flash point

38 degree Celsius.



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Evaporation rate	No data available.
Flammability	Flammable (note that this is due to the low concentration of i.propanol and is not an inherent property of the major constituent).
Upper & lower flammability limits	No data available.
Vapour pressure	No data available.
Vapour density	No data available.
Relative density	No data available.
Solubility	Soluble with water.
Partition coefficient (n.octonol:water)	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No specific data, mobile liquid.
Specific heat value	No data available.
Particle size	Not applicable.
Volatile organic compounds content	Contains a small amount of i.propanol.
% volatile	Less than 20%.
Saturated vapour concentration	No data available.
Release of invisible flammable vapours and gases	Contains a small amount of i.propanol that can be released and can be a flammable vapour, but this is a transient state only.

ADDITIONAL PARAMETERS

Shape and aspect ratio	Not applicable.
Crystallinity	Not applicable.
Dustiness	Not applicable.
Surface area	Not applicable.
Surface area	Not applicable.



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Degree of aggregation or agglomeration	Not applicable.
Ionisation (redox potential)	No data available.
Biodurability or biopersistance	No specific data but unlikely to be persistent and unlikely to bioaccumulate.

Section 10 : STABILITY & REACTIVITY

Reactivity	Relatively unreactive, will not polymerise, but avoid contact with strong oxidising agents.
Chemical stability	At normal storage conditions this product is chemically stable.
Conditions to avoid	Avoid excessive heat, unventilated spaces and direct sunlight.
Incompatible materials and possible hazardous reactions	Avoid contact with strong oxidising substances.
Hazardous decomposition products	No specific data is available although it is likely that volatile phosphates would be released if the product was subjected to severe and rapid decomposition.

Section 11 : TOXICOLOGICAL INFORMATION

Information on routes of exposure	Surface contact with the eye. Surface contact with skin or mucous membranes. Inhalation.
Symptoms related to exposure	Irritation of eye, mucous membranes or respiratory system. Likely to be transient and highly treatable by irrigation.
Numerical measures of toxicity	No data available.
Immediate, delayed and chronic health effects from exposure	Immediate but transient surface irritation. No data available on the effects of chronic exposure.
Exposure levels	No data available.
Data limitations	No data available.



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Section 12 : ECOLOGICAL INFORMATION

Ecotoxicity	No data available.
Persistence and degradability	No specific data but unlikely to be persistent in the environment, likely to degrade.
Bioaccumulative potential	No data available.
Mobility in soil	No specific data but having surfactant properties this product is likely to be mobile in the presence of water.
Other adverse effects	No data available.

Section 13 : DISPOSAL CONSIDERATIONS

Safe handling and disposal methods	Details are provided on the product label.
Disposal of any contaminated packaging	Details are provided on the product label.
Environmental regulations	Must not be discharged into waterways without prior local government approval.

NOTE : Please read the product label for additional information. Instructions on the label must take precedence over this SDS.

Section 14 : TRANSPORT INFORMATION

UN Number	No UN number allocated.
Proper shipping name	Not specified in the Australian Dangerous Goods Code 7 th edition. Can be shipped as alkylaryl polyoxyethylene glycol phosphate ester solution.
Transport hazard class	No data provided in the Australian Dangerous Goods Code 7 th edition.
Packaging group	No data provided in the Australian Dangerous Goods Code 7 th edition.
Environmental hazards	No data is available from literature.
Special precautions during transport	None known.
Hazchem code	No data provided in the Australian Dangerous Goods Code 7 th edition.



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Section 15 : REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product No special provisions apply to this product.

Poisons schedule number No poisons schedule number is available for this product nor for any of the main constituents

Section 16 : OTHER INFORMATION

Date of preparation or review October 2014

Key abbreviations or acronyms used Where relevant, full wording followed by [square bracketing] abbreviations are provided in this SDS.

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