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## SAFETY DATA SHEET

### Section 1 : IDENTIFICATION

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

### Section 2 : HAZARDS IDENTIFICATION

<b>Classification of the hazardous chemical</b>	<p>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<sup>th</sup> edition.</p>
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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

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



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Section 1 in this SDS. Have this SDS with you when you call.

### Section 5 : FIRE FIGHTING MEASURES

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

### Section 6 : ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures</b>	Wear full protective clothing including eye protection (safety glasses or goggles). If vapour cannot dissipate wear a respirator or breathing apparatus.
<b>Environmental precautions</b>	In the event of a major spill, prevent spillage from entering drains or water-courses.
<b>Methods and materials for containment and cleaning up</b>	<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

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

<b>Shape and aspect ratio</b>	Not applicable.
<b>Crystallinity</b>	Not applicable.
<b>Dustiness</b>	Not applicable.
<b>Surface area</b>	Not applicable.
<b>Surface area</b>	Not applicable.





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

## Section 10 : STABILITY & REACTIVITY

<b>Reactivity</b>	Relatively unreactive, will not polymerise, but avoid contact with strong oxidising agents.
<b>Chemical stability</b>	At normal storage conditions this product is chemically stable.
<b>Conditions to avoid</b>	Avoid excessive heat, unventilated spaces and direct sunlight.
<b>Incompatible materials and possible hazardous reactions</b>	Avoid contact with strong oxidising substances.
<b>Hazardous decomposition products</b>	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

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

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## Section 12 : ECOLOGICAL INFORMATION

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


## Section 13 : DISPOSAL CONSIDERATIONS

<b>Safe handling and disposal methods</b>	Details are provided on the product label.
<b>Disposal of any contaminated packaging</b>	Details are provided on the product label.
<b>Environmental regulations</b>	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

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

**END OF DOCUMENT**