

# SAFETY DATA SHEET

## Valagro Erger

Date of Issue: August 2016

### 1. IDENTIFICATION

<b>Product Identifier:</b>	<b>Valagro Erger</b>
<b>Other Means of Identification:</b>	None
<b>Recommended Use of the Chemical and Restrictions on Use:</b>	Fertiliser
<b>Details of Manufacturer or Importer:</b>	Campbells Fertilisers Australasia 18 Raymond Road, Laverton North, Victoria, 3026 Phone: (03) 9931 2211 Fax: (03) 9931 2201 <a href="http://www.campbellsfert.com.au">www.campbellsfert.com.au</a>
<b>Emergency Telephone Number:</b>	(03) 9931 2211 (business hours only 8.30 am to 5.00 pm) 0418 350 726 (after business hours)

### 2. HAZARD(S) IDENTIFICATION



Pictogram: Exclamation Mark

Pictogram: Corrosion

#### **GHS Hazard Class and Category:**

Acute Toxicity Oral Category 4: "Warning"

Hazard statement: H302 Harmful if swallowed

Eye Damage Category 1: "Danger"

Hazard statement: H318 Causes serious eye damage

#### Precautionary Statements:

##### **Prevention**

P264 Wash hands thoroughly after handling

P270 Do not eat, drink or smoke when using this product.

P280 Wear eye protection/face protection

##### **Response**

P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor/physician

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### Storage

No additional information

### Disposal

P501 Dispose of contents/container in accordance with local/regional/national regulations

**ADG Classification:** Based on available information, not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7<sup>th</sup> Edition

**SUSMP Classification:** Not scheduled

### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component:	CAS Number:	Proportion (%w/w):
Oxirane, 2-methyl-, polymer with oxirane, mono(2-propylheptyl) ether	166736-08-9	≥20%-<25%
Ammonium nitrate	6484-52-2	≥15%-<20%
Nitric acid, ammonium calcium salt	15245-12-2	≥15%-<20%

### 4. FIRST AID MEASURES

#### Description of Necessary First Aid Measures:

**Inhalation:** Remove casualty to fresh air and keep warm and at rest.

**Skin Contact:** Take off all contaminated clothing immediately. Areas of the body that have or are suspected of having come into contact with the product must be rinsed immediately with plenty of running water and soap. OBTAIN IMMEDIATE MEDICAL ATTENTION. Wash the body thoroughly in a shower or bath. Dispose of contaminated clothing safely.

**Eye Contact:** Rinse with plenty of water with the eyelids held open for a sufficient length of time, then consult an ophthalmologist immediately. Protect uninjured eye.

**Ingestion:** Never give anything by mouth to an unconscious person. If person is conscious, rinse mouth with water and then give plenty of water to drink. Do not induce vomiting unless instructed to do so by medical personnel. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

**First Aid Facilities:** Ensure washing facilities, including an eyewash, are available and maintained.

**Advice:** No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Remove contaminated clothing using protective gloves.

#### Symptoms caused by Exposure:

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- Inhalation:** If inhaled, especially at high temperatures, the vapours may be very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin Contact:** Pain, irritation, redness, blistering may occur.
- Eye Contact:** Causes serious eye damage, pain, redness, tearing.
- Ingestion:** Harmful if swallowed. May cause burns to mouth, throat and stomach. Abdominal pain, confusion, convulsions, nausea, dizziness.

### Medical Attention and Special Treatment:

If exposed, concerned or if symptoms persist, get medical attention/advice immediately. If medical advice is needed, have product container, label or safety data sheet at hand.  
Treatment: no data available

## 5. FIRE FIGHTING MEASURES

- Suitable Extinguishing Equipment:** Use flooding quantities of water for extinction. Do NOT Use chemical extinguisher or foam or attempt to smother the fire with steam or sand
- Specific Hazards arising from the Chemical:** Do not inhale explosion and combustion gases. Burning produces heavy smoke containing carbon oxides (CO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>). Avoid breathing dust, vapour or fumes from burning materials. In case of inhalation of decomposition products in a fire, symptoms may be delayed.
- Special Protective Equipment and Precautions for Fire Fighters:** Use suitable breathing apparatus. Do not inhale explosion and combustion gases. In case of inhalation of decomposition products in a fire, symptoms may be delayed. Promptly isolate the area 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. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- This product contains nitrates that will support combustion even in the absence of air. If involved in a fire, the high temperatures can generate flammable vapours and in the presence of an ignition source can burn or explode. Vapours may travel considerable distances to a source of ignition where they can ignite, flash back or explode.
- 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 the European standard EN469 will provide a basic level of protection for chemical incidents,

## 6. ACCIDENTAL RELEASE MEASURES

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<b>Personal Precautions, Protective Equipment and Emergency Procedures:</b>	<p>No action shall be taken involving any personal risk or without suitable training.</p> <p>Do not touch or walk through spilled material; there is a risk of slipping due to leakage/spillage of product.</p> <p>For non-emergency personnel:</p> <ul style="list-style-type: none"> <li>-Wear protective clothes giving total skin protection, gloves and safety glasses</li> <li>-Eliminate all ignition sources; ensure adequate ventilation</li> <li>-Keep people not involved in the emergency intervention away from the affected area.</li> <li>-Alert the internal emergency team</li> </ul> <p>For emergency responders:</p> <ul style="list-style-type: none"> <li>-Wear protective clothes giving total skin protection, nitrile-rubber gloves and safety glasses, appropriate respirator when ventilation is inadequate.</li> <li>-See protective measures in section 8</li> <li>-Eliminate all ignition sources</li> <li>-Move people into a safe place</li> </ul>
<b>Environmental Precautions:</b>	<p>Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Dilute with water and retain contaminated wash water and dispose in authorized facilities or pick up in clean plastic labeled containers and reuse as fertilizer. In case of gas escape or entry into waterways, soil or drains, inform the responsible authorities. Suitable material for taking up: soil, sand or other non-combustible materials.</p>
<b>Methods and Materials for Containment and Cleaning Up:</b>	<p>Wash with plenty of water. Contain the spillage with soil, sand or other non-combustible adsorbing material. Collect the product in clean labeled plastic containers and reuse as fertilizer or dispose in an approved landfill.</p>

<b>7. HANDLING AND STORAGE</b>
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<b>Precautions for Safe Handling:</b>	<p>Avoid contact with skin and eyes, inhalation of vapours and mists. Do not use empty containers before they have been cleaned. Before transferring product, ensure there are no incompatible material residuals in the containers. Contaminated clothing should be changed before entering eating areas. Do not drink or eat in work areas. See section 8 for recommended protective equipment.</p>
<b>Conditions for Safe Storage, including any Incompatibilities:</b>	<p>Keep in original containers tightly closed in a cool well-ventilated area, away from sources of heat, direct sunlight, food, drink and feed and incompatible material.</p> <p>Incompatible materials: oxidizing and reducing agents, combustible materials, acids or bases, sodium or calcium hypochlorite, chrome, zinc, copper and their alloys, chlorides. Keep away from organic materials, oil, grease, grains. Adequately ventilate premises.</p>

<b>8. EXPOSURE CONTROLS AND PERSONAL PROTECTION</b>
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**Exposure Standards:** No occupational exposure limit available for the mixture.  
 No occupational exposure limit available for Oxirane, 2-methyl-, polymer with oxirane, mono(2-propylheptyl) ether

**Ammonium nitrate:**

Type	Compartment detail	Value	Workers Consumers	Method details
DNEL	Long term dermal	21.3 mg/kg/bw/day	Workers	Systemic
DNEL	Long term inhalation	37.6 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Long term oral	N.A.	Workers	N.A.
DNEL	Long term dermal	12.8 mg/kg/bw/day	Consumers	N.A.
DNEL	Long term inhalation	37.6 mg/m <sup>3</sup>	Consumers	N.A.
DNEL	Long term oral	12.8 mg/kg/bw/day	Consumers	N.A.
Predicted effect concentrations				
Type	Compartment detail	Value	Method detail	
PNEC	Fresh water	0.45 mg/L	Assessment Factors	
PNEC	Marine water	0.045 mg/L	Assessment Factors	
PNEC	Intermittent release	4.5 mg/L	Assessment Factors	
PNEC	Sewage Treatment Plant	18 mg/L	Assessment Factors	

**Nitric acid, ammonium calcium salt:**

Type	Compartment detail	Value	Workers Consumers	Method details
DNEL	Long term dermal	13.9 mg/kg/bw/day	Workers	Systemic
DNEL	Long term inhalation	24.5 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Long term dermal	8.33 mg/kg/bw/day	Consumers	Systemic
DNEL	Long term inhalation	6.3 mg/m <sup>3</sup>	Consumers	Systemic
DNEL	Long term oral	8.33 mg/kg/bw/day	Consumers	Systemic
Predicted effect concentrations				
Type	Compartment detail	Value	Method detail	
PNEC	Fresh water	0.45 mg/L	Assessment Factors	
PNEC	Marine water	0.045 mg/L	Assessment Factors	
PNEC	Intermittent release	4.5 mg/L	Assessment Factors	
PNEC	Sewage Treatment Plant	18 mg/L	Assessment Factors	

**Biological Monitoring:** Not available.

**Control Banding:** Not available.

**Engineering:** Not specified.

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### Controls:

<b>Individual Protection Measures e.g. Personal Protective Equipment (PPE):</b>	<p>Please observe the usual precautionary measures for handling of chemicals</p> <p><i>Eye and Face Protection:</i> Use close fitting safety goggles according to the standard EN166. Do not use contact lenses.</p> <p><i>Skin Protection:</i> Use protective gloves that provide comprehensive protection. Suitable materials also with prolonged direct contact according to EN374. (Recommended: Protective index 6, corresponding &gt;480 minutes of permeation time): nitrile rubber – 0.4 mm coating thickness</p> <p>Use clothing that provides comprehensive protection according to EN14605.</p> <p><i>Respiratory Protection:</i> Not needed for normal use. Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN143 or 149, Type P2 or FFP2).</p> <p><i>Thermal Hazards:</i> Thermal decomposition may produce carbon oxides (CO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>).</p>
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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Brown liquid
<b>Odour:</b>	None
<b>Vapour Pressure (mm Hg):</b>	Not available
<b>Density:</b>	1.25 at 20°C
<b>Boiling Point:</b>	>100°C
<b>Freezing/Melting Point:</b>	Not available
<b>Solubility (aqueous solution):</b>	Soluble
<b>Specific Gravity:</b>	Not available
<b>pH:</b>	5.7 at 20°C
<b>Flash Point:</b>	Not available
<b>Flammability (explosive) Limits:</b>	Not applicable
<b>Auto-Ignition Temperature:</b>	Not available
<b>Octanol/Water Partition Coefficient:</b>	Not available

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Stable under normal conditions of storage and handling
<b>Possibility of Hazardous Reactions:</b>	In case of fire and high temperatures, it can develop dangerous decomposition products. The product may intensify fire. The product itself is not combustible but it can support the combustion of combustible materials even in the absence of air.

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<b>Conditions to Avoid:</b>	Avoid high temperatures which induce thermal decomposition. Avoid sparks and flames. Store away from direct sunlight.
<b>Incompatible Materials:</b>	Avoid contamination by any source including chrome, zinc, copper and their alloys, chlorides. Avoid contact with reducing and oxidizing agents, combustible materials, acids or bases, sodium or calcium hypochlorite. Keep away from organic materials, oil, grease, grains.
<b>Hazardous Decomposition Products:</b>	In case of high temperatures: carbon oxides (CO <sub>x</sub> ), nitrogen oxides (NO <sub>x</sub> ).

### 11. TOXICOLOGICAL INFORMATION

#### Toxicological Information of the Mixture:

ATE Oral of mixture: >300 ≤2000

#### Toxicological Information of Main Substances found in Mixture:

<b>Acute Toxicity:</b>	NOAEC in humans for acute respiratory effects would probably be higher than 0.02 mg Fe/m <sup>3</sup> of respirable aerosols for a 2-hour exposure period
<b>Skin Corrosion/Irritation:</b>	Ferrous sulfate heptahydrate, 500 mg of solid applied to skin under semi-occlusion; Rabbit; OECD TG 404 and GLP; Irritant; 1; Clouzeau, 1994
<b>Serious Eye Damage/Irritation:</b>	Solutions of industrial grade ferric chloride and ferric sulfate have a pH of <1. They would therefore be expected to be corrosive, according to EU criteria (Directive 93/21/EEC)
<b>Respiratory or Skin Sensitisation:</b>	Not sensitizing to the respiratory system and skin
<b>Germ Cell Mutagenicity:</b>	Based on available data, the classification criteria are not met
<b>Carcinogenicity:</b>	Based on available data, the classification criteria are not met
<b>Reproductive Toxicity:</b>	Not classified. NOAELs for reproductive and developmental effects ≥1000 mg/kg body weight/day
<b>Specific Target Organ Toxicity (STOT) - Single Exposure:</b>	Based on available data, the classification criteria are not met
<b>Specific Target Organ Toxicity (STOT) - Repeated Exposure:</b>	Based on available data, the classification criteria are not met
<b>Aspiration Hazard:</b>	Based on available data, the classification criteria are not met
<b>Likely Routes Of Exposure</b>	
<b>Inhalation:</b>	No data available
<b>Skin:</b>	Causes skin irritation.
<b>Eye:</b>	Causes serious eye irritation.
<b>Ingestion (of iron sulfate):</b>	Vomiting, diarrhea, mild lethargy, upper abdominal pain, pallor, and hyperglycaemia with more severe clinical findings including cyanosis, stupor, acidosis, haematemesis, shock, and coma (Aisen, 1990).

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### 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	<p>Adopt good working practices so that the product is not released to the environment.</p> <p><u>Oxirane, 2-methyl-, polymer with oxirane, mono(2-propylheptyl) ether</u>            Toxicity to fish:            LC50 (96 h) 10-100 mg/L <i>Brachydanio rerio</i> (OECD Guideline 203)            Aquatic invertebrates:            EC50 (48 h) 10-100 mg/L <i>Daphnia magna</i>            Aquatic plants:            EC50 (72 h) 10-100 mg/L <i>Scenedesmus subspicatus</i></p> <p><u>Ammonium nitrate</u>            LC50 Fresh water fish 48 h = 447 mg/L            EC50 Fresh water Daphnia 48 h = 100 mg/L            EC50 Marine water aquatic plants 10 days = 1700 mg/L            Inhibition of microbial activity:            EC50 3-hour &gt;1000 mg/L; NOEC 180 mg/L</p> <p><u>Nitric acid, ammonium calcium salt</u>            LC50 Fresh water fish 48 h = 447 mg/L            EC50 Fresh water Daphnia 48 h = 100 mg/L            EC50 Fresh water algae 72 h = 100 mg/L            Inhibition of microbial activity:            EC50 3-hour &gt;1000 mg/L; NOEC 180 mg/L            Algae EC50 72 h &gt;1000 mg/L; NOEC 100 mg/L            PNEC: water: 0.45 mg/L; sea water 0.045 mg/L</p>
<b>Persistence and Degradability:</b>	<p><u>Oxirane, 2-methyl-, polymer with oxirane, mono(2-propylheptyl) ether</u>            Elimination information:            ≥90% Bismuth-active substance (OECD 303A)            Analogous: Assessment derived from products with similar chemical character.            &gt;60% CO<sub>2</sub> formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C).</p> <p><u>Ammonium nitrate</u>            Not relevant for inorganic substances.</p> <p><u>Nitric acid, ammonium calcium salt</u>            Not relevant for inorganic substances.</p>
<b>Bioaccumulative Potential:</b>	<p>This product does not contain any bioaccumulative substances.</p>
<b>Mobility in Soil:</b>	<p>The product may move with surface or groundwater flows because of its water solubility.</p>

### 13. DISPOSAL CONSIDERATIONS



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**Product Disposal:** Generation of waste should be avoided or minimized wherever possible. Recover if possible. In doing so, comply with state, federal and local regulations.

**Container Disposal:** Dispose of according to local regulations. Incineration or landfill should be considered when recycling is not feasible.

### 14. TRANSPORT INFORMATION

**Classification:** Based on available information, not classified as Dangerous Goods for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7<sup>th</sup> Edition.

**UN Number:** Not applicable

**Proper Shipping Name or Technical Name:** Not applicable

**Transport Hazard Class:** Not applicable

**Packing Group:** Not applicable

**Environmental Hazards for Transport Purposes:** Not applicable

**Special Precautions for User:** Not applicable

**HAZCHEM Code:** Not applicable

### 15. REGULATORY INFORMATION

**SUSMP:** Not scheduled

**APVMA:** Exempt from registration

**State Departments of Agriculture / Primary Industries:** Registration not required

**Australian Inventory of Chemical Substances (AICS):** All components listed

**Toxic Substance – NZ** Exempt

### 16. OTHER INFORMATION



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**Edition:** Initial edition  
**Revision Due:** August 2021  
**Reason for Revision:** Initial version  
**Preparation Information:** Prepared by Campbells Fertilisers Australasia  
**Data Sources:** Supplier SDS

### Glossary:

**APVMA** Australian Pesticides and Veterinary Medicines Authority  
**CAS** Chemical Abstract Services number, used to uniquely identify chemical compounds  
**PPE** Personal protective equipment  
**SUSMP** Standard for the Uniform Scheduling of Medicines and Poisons

This SDS summarises our best knowledge of the health and safety hazard information available for this product and how to safely handle and use it. Since the use of this information and the conditions of the use of this product are not under the control of Campbell's Fertilisers, it is the user's responsibility to determine conditions of safe use of the product.

END OF SDS