



COLIN CAMPBELL (CHEMICALS) PTY. LTD.

MATERIAL SAFETY DATA SHEET

Date of Issue: 1 July 2012

1) IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: CAMPBELL ARMOBREAK
Other Names: None
Chemical Group: Alkyl amine polymer
Recommended Use: Adjuvant for use on agricultural crops.
Supplier Details: Colin Campbell (Chemicals) Pty Ltd ABN 29 000 045 590
5 Blackfriar Place
Wetherill Park NSW 2164
Telephone: (02) 9725 2544
Fax: (02) 9604 7768
Email: cccsyd@campbellchemicals.com.au
Website: www.campbellchemicals.com.au
Contact: Product Development Manager – (02) 9725 2544
Emergency Telephone Number: (02) 9725 2544 – 8am to 6pm Monday to Friday.

2) HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE - DANGEROUS GOOD

Hazardous classification: Hazardous according to the criteria of the National Occupational Health & Safety Commission (NOHSC)

Risk phrases: R22 –
R51/53 – Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases: See sections 4,5,6,7,8,10,12,13

ADG Classification 9
Environmentally hazardous substance, Liquid, n.o.s. Alkoxylated fatty amine)

SUSDP classification: 5

3) COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration
Alkyl amine polymer	68213-26-3	>95%
Inerts	Non hazardous	<10%

4) FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poison Information Centre (Ph: 13 11 26) and follow the advice given. Show this Material Safety Data Sheet to the doctor.

Inhalation: Not likely to occur. If significant exposure, remove to fresh air and keep at rest.

Skin Contact: Carefully remove contaminated clothing. Wash affected areas with soap and water.



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Date of Issue: 1 July 2012

4) FIRST AID MEASURES continued

Eye contact:	Check and remove any contact lenses. Rinse eyes immediately with clean water for at least 15 minutes and seek medical aid. Eyelids should be held away from the eyeball to ensure thorough rinsing.
Ingestion:	Wash mouth out with water. Do NOT induce vomiting. Give water or a few glasses of milk to drink. Loosen tight clothing.
First Aid facilities	Ensure eye wash and safety shower are available.
Medical Attention:	Perform gastric lavage.

5) FIRE FIGHTING MEASURES

Extinguishing media	Treat as an oil fire. Water mist, foam, dry chemical, carbon dioxide (CO ₂). Do not use water jet. Water spray may be ineffective if used by inexperienced firefighters. Combustible.
Hazard from combustion products	In a fire, formation of carbon monoxide and carbon dioxide can be expected.
Precautions for fighting fires	Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away. If it can be done safely remove intact containers from the fire. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of extinguishing agent and spillage safely later. Do not release contaminated water into the environment.
Hazchem Code	2X

6) ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled material or contaminated surfaces. Do not smoke, eat or drink during the clean up process. Wear personal protective clothing and equipment as detailed in Section 8 PERSONAL PROTECTION. Keep people and animals away. Contain spill and absorb with earth, sand, clay or other absorbent material. Prevent spilled material from entering drains or watercourses. Collect and store in properly labelled drums for safe disposal. Clean floor with a damp cloth and place it in the drum. Seal drums and label ready for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses etc is unavoidable warn the local water authority.

7) HANDLING AND STORAGE

Handling	Keep out of reach of children. Will irritate eyes and skin. Avoid contact with eyes and skin. Do not inhale spray mist. After use and before eating, drinking or smoking wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves and contaminated clothing.
Storage	Store in the closed original container in a cool well ventilated area. Do not store for prolonged periods in direct sunlight. Store in a locked room away from children, animals, food, animal feed, seed and fertilisers. Protect from frost.
Flammability	Combustible, C2



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8) EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Standards	No exposure standards have been assigned.	
Biological Limit Values	None allocated	
Engineering Controls	Control process conditions to avoid contact. Use in a well ventilated area only.	
Personal Protective Equipment	Eyes:	Safety goggles or face shield if exposure is possible
	Clothing:	Chemical resistant disposable overalls
	Gloves:	PVC gloves
	Respiratory:	If inhalation is likely an AS/NZS 1715/1716 approved respirator should be worn.

9) PHYSICAL AND CHEMICALS PROPERTIES

Appearance:	Amber liquid
Odour:	None
Vapour pressure:	< 10Pa @ 20°C, <100Pa @345°C
Vapour density:	Not available
Boiling point:	>300°C
Melting point:	< -10°C (Pour point, ASTM D97)
pH:	6 – 10
Solubility:	Soluble/dispersible in water
Specific gravity:	0.980 at 20°C
Flash point:	>178OC (Pensky-Martens closed cup, ISO 2719)
Flammability (explosive) limit:	Not available
Auto ignition temperature:	Not available
Partition coefficient (octanol/water):	Not available

10) STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use.
Conditions to avoid:	None known
Incompatible materials :	None known



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10) STABILITY AND REACTIVITY continued

Hazardous decomposition products: In a fire, formation of hydrogen chloride, hydrogen cyanide, carbon monoxide and nitrogen oxides can be expected. Otherwise no typical hazardous decomposition products known.

Hazardous reactions: None known

11) TOXICOLOGICAL INFORMATION

Inhalation: No effect is expected

Skin contact: No effect is expected.

Eye contact: Mildly irritating.

Ingestion: Product toxicity is low, but may be harmful if swallowed in large amounts.

ANIMAL TOXICITY DATA – PRODUCT

Acute:

Oral toxicity: LD₅₀ rat 1663mg/kg

Dermal toxicity: LD₅₀ rat >2000mg/kg

Inhalation toxicity: LC₅₀ rat (4 hour): 3.2mg/L

Skin irritation: Not irritating

Irritation of mucous membranes: No data

Sensitisation: Not sensitising

Chronic:

Not mutagenic. No Observed Effect Level (NOEL) = 15mg/kg/day

12) ECOLOGICAL INFORMATION

Very toxic to aquatic organisms and may cause adverse effects in the aquatic environment. DO NOT contaminate streams, rivers or waterway with Armobreak or the used containers.

Ecotoxicity: Fish toxicity: LC₅₀ (96 h) in trout (*Onchorhynchus mykiss*) 0.34mg/L
Daphnia toxicity: EC₅₀ (48 h) water flea (*Daphnia magna*) 0.26mg/L

Environmental fate, persistence and degradability, mobility: Not readily biodegradable. No bioaccumulation is expected (SCAS test).



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12) DISPOSAL CONSIDERATIONS

Triple or preferable pressure rinse containers before disposal. Add rinsings to the mixing tank. Do not dispose of undiluted chemical on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

13) TRANSPORT INFORMATION

UN Number:	3082
Proper Shipping name:	Environmentally hazardous substance, Liquid, N.O.S. (Alkoxlated fatty amine)
Class and subsidiary risk:	9
Packing Group:	III
EPG:	
Hazchem code:	2X

14) REGULATORY INFORMATION

No requirement for registration under the Agricultural and Veterinary Chemicals Act 1988 (Commonwealth)

15) OTHER INFORMATION

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact this company.

END OF MSDS