



SAFETY DATA SHEET

ARMOBREAK®

Date of Issue: 1 Jun 2016

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s): Fatty amine polymer

Recommended use: Agricultural adjuvant.
Blossom Thinner in Stone fruit

Supplier: Etec Crop Solutions Ltd
PO Box 51584
Pakuranga, Auckland
Phone 0800 100 325

Emergency telephone number: 0800 Poison (0800 764 766) 24 Hours

2. HAZARDS IDENTIFICATION

Hazard Classification: Toxic - 6.1C, 6.4A,
Ecotoxic - 9.1A, 9.3C, 9.4B

Required identification Details: **WARNING**
KEEP OUT OF REACH OF CHILDREN
ECOTOXIC
Harmful, irritant. Harmful if swallowed.
May cause eye irritation.
Very toxic to aquatic organisms. May cause long-term adverse in the aquatic environment.
Dangerous for the environment. Avoid release to the environment.
Wash skin thoroughly after using.
Do not eat, drink or smoke when using this product. Wear protective gloves.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
Alkyl amine alkoxylated	1258305-76-8 (polymer)	>95

4. FIRST-AID MEASURES

Description of necessary first aid measures:

General	Move away from danger area. If symptoms persist, consult a physician. Have SDS sheet available for the doctor.
Effects and symptoms	No known symptoms
<u>First-aid measures</u>	Remove from contaminated area. Consult a doctor. Symptomatic treatment.
Inhalation:	Not likely to occur. Move person to fresh air if inhaled. Seek medical attention after significant exposure.
Ingestion:	Harmful if swallowed. Rinse with water. Drink plenty of water afterwards or a few glasses of milk. Symptomatic treatment. Do not give anything by mouth to an unconscious person. Call the National Poisons Centre or a doctor if feeling unwell.
Skin contact:	Remove contaminated clothing and shoes immediately. Rinse with plenty of water or use recognized skin cleaner. Launder clothes before re-use.
Eye contact:	Flush eyes with clean running water for 15 minutes. Remove contact lenses. Protect unharmed eye. If irritation persists see a doctor.
Notes to a physician:	If this substance has been swallowed perform gastric lavage.

5. FIRE-FIGHTING MEASURES

HAZCHEM Code:	3Z
Extinguishing media :	Treat as an oil fire. Extinguishing media: water mist*, foam, dry chemical powder or carbon dioxide. (Water spray may be ineffective unless used by experienced fire fighters). Use extinguishing media appropriate to local circumstances and the surrounding environment. Unsuitable extinguishing media: water jet. Water spray may be ineffective unless used by experienced fire fighters.
Hazardous thermal (de)composition products:	Carbon monoxide, carbon dioxide. Non-flammable. If involved in a fire it will support combustion.
Protection of fire-fighters:	Wear self contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses. Residues must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	The usual precautions for handling chemicals should be observed. Use personal protective equipment. For personal protection see Section 8.
Environmental precautions:	Prevent entry of product into drains and waterways. Inform authorities if product enters rivers, lakes or drains.
Methods for cleaning up:	Contain spill, do not allow material to enter sewers or bodies of water. Keep unprotected persons and animals out of the area. Collect contaminated fire extinguishing water separately. Fire residues and contaminated water must be disposed of in accordance with local regulations. Cover the remainder with inert absorbent (e.g. vermiculite, sawdust).

Keep in suitable closed containers for disposal.

7. HANDLING AND STORAGE

Handling:

Avoid contact with skin and eyes. Do not inhale spray. When using do not eat, drink or smoke. Avoid release to the environment. For personal protection see Section 8.

Storage:

Normal measures for preventive fire protection.

Store in original container, tightly closed in a locked, dry, well ventilated place away from feed, seed and foodstuffs. Keep away from sparks, heat and flames. Keep out of reach of children and animals.

No decomposition if stored and applied as directed.

To maintain quality, store at ambient temperatures.

Packaging materials:

20 litre HDPE plastic jerry cans

200 litre metal drums

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Guidelines

Workplace exposure standards:

No exposure limit has been established.

Contains no substances with occupational exposure limit values.

Exposure Standards outside:

Not established

The workplace:

Engineering measures

Exposure control measures:

Provide eyewash station. Effective exhaust system. The usual precautionary measures for handling chemicals should be observed.

Personal Protective Equipment

Detail specifications for equipment:

Respiratory system:

No specific recommendations.

Skin and body:

Protective suit

Hands:

Neoprene or nitrile rubber.

Eyes:

Avoid contact with eyes. Use eye wash bottle with pure water. Wear safety goggles.

General hygiene:

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke while using.

Wash hands after work and before eating

9. PHYSICAL AND CHEMICAL PROPERTIES

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

Physical State:

Liquid (20°C)

Colour:

Amber

Odour:

Amine-like

pH:

6-10 @ 100g/l in water

Vapour Pressure:

< 10 Pa (20°C), 100 Pa (345°C)

Density:

990 kg/m³ (20°C)

Boiling Point:

> 300°C

Melting point:

< -10°C

Solubility:

Soluble/dispersible

Solubility in other solvents
Cloud point in water (1%)
Information for flammable material including:

- **Flashpoint (state test Method)**

Soluble in ethanol and octanol. Soluble in xylene.
19°C (AB-46-1203, 20°C)

>178°C ,
Pensky-Martens closed cup [ISO 2719]

Auto – ignition Temperature:
Octanol/water partition coefficient:
Explosion properties:
Oxidation properties:
Viscosity:

Not determined
Not known
Not explosive
Not classified as oxidising
235 mPa.s (20°C Newtonian)

10. STABILITY AND REACTIVITY

Reactivity:

Weak base. Exothermic (reversible) reaction with strong acids.

Stability:

Stable under recommended storage conditions. No dangerous reaction(s) known under conditions of normal use. No decomposition if stored and handled properly

Conditions to avoid:

None known

Materials to avoid:

None known

Hazardous decomposition Products:

None known

Hazardous polymerization:

None known

Specific Data:

N/A

Hazardous reactions :

None known

11. TOXICOLOGICAL INFORMATION

Component: Alkyl amine polymer.

No experimental ecological data are available on the preparation as such. From structurally related products, the following may be expected.

Hazard Summary:

Inhalation

Inhalation of (aqueous) aerosols may cause irritation to mucous membranes.

Skin

May cause skin irritation

Eyes

May cause irritation to eyes, respiratory system.

Ingestion

Harmful if swallowed. May cause irritation to mucous membranes.

Acute toxicity - Dermal

LD₅₀ > 2000 mg/kg (rat) (*IAAS E-file*)

Acute toxicity - Oral

LD₅₀. 500-2000 mg/kg (rat) (*IAAS E-file*)

Acute toxicity – Inhalation

Vapour pressure low; inhalation; not relevant.

Skin irritation

Non-irritating (*IAAS E-file*)

Eye irritation

Mildly irritating (*IAAS E-file*)

Sensitization

Not sensitizing (*IAAS E-file*)

Genotoxicity

Not mutagenic (Ames test) (*IAAS E-file*)

In vitro cell gene mutation test (in V79 cells): not mutagenic

In vitro cytogenetic test in human lymphocytes: not mutagenic

Other toxicological information:

Sub-acute (28 days) oral toxicity (rat):

No Observed Adverse Effect level;

NOEL I= 15mg/kg/day (*IAAS E-file*)

12. ECOLOGICAL INFORMATION

No experimental ecological data are available on the preparation as such. From structurally related products, the following may be expected.

Ecotoxicity:

Fish	96 h – LC50: 0.34 mg/l (Oncorhynchus mykiss) (IAAS E-file)
Daphnia	48 h-EC50: 0.26 mg/l (IAAS E-file)
M-Factor	1

Persistence and degradability:

Biodegradability	Not readily biodegradable
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Bioaccumulative potential	No data available
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Mobility in Soil	No data available
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Results of PBT and vPvB	No data available
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13. DISPOSAL CONSIDERATIONS

The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Hazardous waste.

Methods of disposal :	Disposal of product and packaging according to local regulations. Use according to label instructions.
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14. TRANSPORT INFORMATION

International transport regulations

UN number:	3082
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Class or Division:	9
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Packing Group:	III
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Marine Pollutant:

Proper shipping name :	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID. N.O.S. (Polymer: alkylamine alkoxylate)
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INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):	Not restricted
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15. REGULATORY INFORMATION

ACVM Registered Number:	P5622
HSNO Approval Code:	HSR000777

16. OTHER INFORMATION

Additional information:	Original Issue Date: 28 th June 2006 Revision Date: 1 June 2016 Replaces: ES365
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DISCLAIMER

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