

DUWETT® STAINLESSDate of Issue: 23rd February 2009**1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION**

Chemical name of active ingredient(s): Alcohol Ethoxylate plus Polyalkylene compounds
Recommended use: Surfactant for use with acid based plant protection products

Supplier: Elliott Technologies Limited
P.O.Box 838
Pukekohe
Phone 0800 100 325

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

2. HAZARDS IDENTIFICATION

Hazard Classification: Harmful – 6.1E, 6.3B
Toxic – 6.4A, 6.5B, 6.8A, 6.9A
Environmental - 9.1D

Required identification Details: **HARMFUL – KEEP OUT OF REACH OF CHILDREN**
TOXIC – may cause sensitization from prolonged skin contact. Repeated oral exposure at high doses may cause reproductive/development damage and damage to the thyroid, liver, kidneys and blood forming system.

HARMFUL – may cause eye irritation and be harmful if swallowed, inhaled or swallowed.

Harmful to aquatic organisms. Avoid contamination of any water supply with product or empty container.

3. COMPOSITION/INFORMATION ON INGREDIENTS**Substance/preparation Information on hazardous ingredients**

Common name	CAS No	%
A. HAZARDOUS Alcohol Ethoxylate	9043-30-5	30 - 60 %
B. NON-HAZARDOUS		
Polyalkylene Oxide	Trade secret	10 - 30 %
Polyalkyleneoxide Silane	Trade secret	10 - 30 %
Polyalkyleneoxide	Trade secret	1 - 5 %

4. FIRST-AID MEASURES**Description of necessary first aid measures:****Effects and symptoms****First-aid measures**

Aerosol harmful if inhaled. Causes eye and skin irritation. Vapor may cause blurring of vision. Repeated ingestion may cause damage to the liver, kidneys, thyroid, male and female reproductive system, and blood-forming system. Repeated inhalation of aerosol of the neat liquid may cause damage to the eyes, blood-forming system, kidneys, thymus, respiratory tract, and nasal cavity.

Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Skin contact:	In case of contact, remove contaminated clothing and shoes, immediately flush skin with plenty of water. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Eye contact:	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.
Notes to a physician:	No specific antedote. Treat symptomatically. Any material aspirated during vomiting may cause lung injury.

5. FIRE-FIGHTING MEASURES

HAZCHEM Code:	2W
Extinguishing media :	Foam, dry chemical (CO ₂)water.
Hazardous thermal (de)composition products:	Oxides of carbon Oxides of silicon Carbon monoxide
Protection of fire-fighters:	Wear full protective clothing and self contained breathing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear protective clothing as prescribed in section 8.
Environmental precautions:	Contain spill, do not allow material to enter sewers or bodies of water. Keep unprotected persons and animals out of the area.
Methods for cleaning up:	Soak up with sand, sawdust or other absorbent material, shovel or sweep up and bury in an approved landfill.

7. HANDLING AND STORAGE

Handling:	Avoid contact with eyes and skin. Do not breathe vapour or mist. Do not swallow. Keep away from heat and flames. Keep out of reach of children and animals.
Storage:	Store in original container, tightly closed in a locked, dry, well ventilated place away from food or feedstuffs.
Packaging materials:	HDPE Plastic

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Guidelines

Exposure Standards:	Not established.
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Engineering measures

Exposure control measures:

General room ventilation is expected to be satisfactory for use at room temperature.
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors at a low level.

Personal Protective Equipment**Detail specifications for equipment:****Respiratory system:**

Respiratory protection not normally required.
If airborne concentrations are likely to be excessive, wear an approved respirator.

Skin and body:

Cotton overalls buttoned to the neck and wrist and a washable hat.

Hands:

Wear elbow length PVC gloves.

Eyes:

Safety goggles or face shield

General hygiene:

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, goggles or face shield and contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES**Physical State: Colour, Odour.**

Yellow to amber liquid with mild odour

pH:

No Data

Vapour Pressure:

<1.0 (mmHg) at 20°C

Boiling Point – C&F:

>150°C

Freezing/melting point:

-20 °C; -4 °F; estimated.

Melting Point

-20 °C; -4 °F; estimated

Solubility:

Dispersable.

Specific gravity or density:

1.0 at 25°C. (1.013 hPa)

Information for flammable material:

Not Flammable

Flashpoint:

110°C

Octanol/water partition coefficient:

Not available

Explosion properties:

Not Explosive

Oxidation properties:

Not an Oxidising Agent.

BOILING POINT - C & F;:**VAPOR PRESSURE (20 C) (MM HG): < 1****VAPOR DENSITY (AIR=1): > 1****FREEZING POINT:****MELTING POINT:****PHYSICAL STATE:** Liquid**ODOR:** Mild**COLOR:** Yellow to amber**EVAPORATION RATE (BUTYL ACETATE=1): < 1****SPECIFIC GRAVITY (WATER=1): 1.00**

10. STABILITY AND REACTIVITY**Stability:**

Stable under normal conditions of use.

Conditions to avoid:

None known.

Materials to avoid:	Normally unreactive; however avoid contact with: Strong bases in the presence of high temperatures. Strong acids Strong oxidizing agents. Materials reactive with hydroxyl compounds.
Hazardous decomposition Products:	Burning can produce the following combustion products:; Oxides of carbon.; Oxides of silicon.; Formaldehyde.; Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant.; Acute overexposure to the products of combustion may result in irritation of the respiratory tract.; This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150'C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. Will not polymerise.
Hazardous polymerization:	Will not polymerise.
Specific Data:	
Hazardous reactions :	None expected

11. TOXICOLOGICAL INFORMATION

Acute toxicity – Oral :	No Data	
Acute toxicity - Dermal :	No Data	
Acute toxicity – Inhalation:	Not available	
Skin irritation :	Slightly irritating	Species: Rabbit
Eye irritation:	Moderate irritation	Species: Rabbit
Sensitization :	This product is a sensitizer.	Species: Mouse
Chronic toxicity:	Repeat ingestion may cause damage to liver, kidneys, thyroid male and female reproductive system and blood forming system.	
Other information :	The following information is based on analogy with a similar material:; This material was not mutagenic in three mammalian test systems including the Chinese Hamster Ovary (CHO)/HGPRT gene mutation assay, a micronucleus cytogenetic assay in mice, and an in vitro mammalian cytogenetic test., In a repeated skin application study with rats, this material caused moderate skin irritation which resolved during a post-application recovery period. There was no evidence for percutaneous cumulative or specific organ toxicity, and no effect on male or female reproductive systems., Findings from a 14-day dietary feeding study with rats show that high dosage repeated ingestion of this material causes reversible adverse effects on the male and female reproductive tracts. Additional effects seen include increased liver weight, altered blood cytology/chemistry, and thyroid enlargement (primarily hypertrophy, with some hyperplasia). Evidence of partial or complete recovery was found over a 28-day recovery period., Findings from a repeat 9-day aerosol inhalation toxicity study with rats show a no-observable-effect-level (NOEL) of less than 0.025 mg/l. Symptoms of toxicity included rales, gasping, ocular opacity, prostration, hypothermia, reduced body weight gain and food consumption, changes in clinical pathology, decreased thymus weight, and microscopic lesions in the nasal cavity. There was no effect on the male or female reproductive systems. It is not	

anticipated that the use of aqueous dilutions of this product would result in this type of aerosol exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Not available
E.E.L	Not established
T.E.L	Not established

13. DISPOSAL CONSIDERATIONS

Methods of disposal :	Triple rinse container and add to spray tank, burn if circumstances, particularly wind direction, permit, otherwise crush and bury in an approved landfill. Do not contaminate bodies of water with chemical or empty container.
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14. TRANSPORT INFORMATION - International transport regulations

UN number:	Not a Dangerous Good
Class or Division:	N/A
Packing Group:	III
Marine Pollutant:	No
Proper shipping name :	N/A

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):

15. REGULATORY INFORMATION

ACVM Registered Number:	Not applicable
HSNO Approval Code:	HSNO Group Standard: HSR002503

16. OTHER INFORMATION

Additional information:	Original Issue Date: 01 September 2006 Revision Date: N/A Replaces: N/A
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Disclaimer EXCLUSION OF LIABILITY: PLEASE READ

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