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This revision issued: June, 2008

### **SECTION 1 - IDENTIFICATION OF CHEMICAL PRODUCT AND COMPANY**

United Phosphorus Ltd,

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St Leonards, NSW 2065

**Substance:** Tralkoxydim is a cyclohexanedione oxime derivative.

Trade Name: Accomplish 400 WG Herbicide

Product Code: 62780

**Product Use:** Agricultural herbicide for use as described on the product label.

Creation Date: June, 2008 Revision Date: June, 2008

### Section 2 - Hazards Identification

### **Statement of Hazardous Nature**

This product is classified as: Xn, Harmful. Xi, Irritating. Hazardous according to the criteria of ASCC.

Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

Risk Phrases: R22, R36. Harmful if swallowed. Irritating to eyes.

Safety Phrases: S20, S22, S24/25, S36/39. When using, do not eat or drink. Do not breathe dust. Avoid contact

with skin and eyes. Wear suitable protective clothing and eye/face protection.

SUSDP Classification: S5

ADG Classification: None allocated. Not a Dangerous Good under the ADG Code.

UN Number: None allocated

### **Emergency Overview**

Physical Description & colour: Blue granulated solid.

Odour: No data; expected to be practically odourless.

Major Health Hazards: harmful if swallowed, eye irritant.

#### **Potential Health Effects**

#### Inhalation:

**Short term exposure:** Available data indicates that this product is not harmful. However product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.

**Long Term exposure:** No data for health effects associated with long term inhalation.

### **Skin Contact:**

**Short term exposure:** Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be mildly irritating, but is unlikely to cause anything more than mild discomfort which should disappear once contact ceases.

Long Term exposure: No data for health effects associated with long term skin exposure.

### **Eye Contact:**

**Short term exposure:** This product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.

Long Term exposure: No data for health effects associated with long term eye exposure.

#### Ingestion:

**Short term exposure:** Significant oral exposure is considered to be unlikely. Available data shows that this product is harmful, but symptoms are not available. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

**Long Term exposure:** No data for health effects associated with long term ingestion.

### Carcinogen Status:

**ASCC:** No significant ingredient is classified as carcinogenic by ASCC. **NTP:** No significant ingredient is classified as carcinogenic by NTP. **IARC:** No significant ingredient is classified as carcinogenic by IARC.

### **MATERIAL SAFETY DATA SHEET**

Issued by: United Phosphorus Ltd Phone: (02)9460 8480

Poisons Information Centre: 13 1126 from anywhere in Australia, (0800 764 766 in New Zealand)

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# Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m³)	STEL (mg/m³)
Tralkoxydim	87820-88-0	400g/kg	not set	not set
Non hazardous surfactants		approx 20%	not set	not set
Other non hazardous ingredients	secret	to 100%	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The ASCC TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak "is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

### Section 4 - First Aid Measures

#### **General Information:**

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

**Skin Contact:** Gently brush away excess solids. Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed.

**Eye Contact:** Quickly and gently brush particles from eyes. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

**Ingestion:** If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

### Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**Extinguishing Media:** Not Combustible. Use extinguishing media suited to burning materials. **Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash point: Does not burn.

Upper Flammability Limit: Does not burn.

Lower Flammability Limit: Does not burn.

**Autoignition temperature:** Not applicable - does not burn.

Flammability Class: Does not burn.

#### Section 6 - Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective glasses and, preferably, goggles. If there is a significant chance that dusts are likely to build up in cleanup area, we recommend that you use a suitable Dust Mask. Use a P1 mask, designed for use against mechanically generated particles eg silica & asbestos.

Stop leak if safe to do so, and contain spill. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Consider vacuuming if appropriate. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

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### Section 7 - Handling and Storage

**Handling:** Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage:** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Check packaging - there may be further storage instructions on the label.

### **Section 8 - Exposure Controls and Personal Protection**

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

### ASCC Exposure limits TWA (mg/m³) STEL (mg/m³)

Exposure limits have not been established by ASCC for any of the significant ingredients in this product.

The ADI for Tralkoxydim is set at 0.005mg/kg/day. The corresponding NOEL is set at 0.5mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, Dec 2006.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

**Ventilation:** This product should only be used where there is ventilation that is adequate to keep exposure below the TWA levels. If necessary, use a fan.

**Eye Protection:** Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.

**Skin Protection:** The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when skin contact is likely.

**Protective Material Types:** We suggest that protective clothing be made from the following materials: rubber, PVC.

**Respirator:** If there is a significant chance that dusts are likely to build up in the area where this product is being used, we recommend that you use a suitable Dust Mask.

Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being used.

# **Section 9 - Physical and Chemical Properties:**

Physical Description & colour: Blue granulated solid.

**Odour:** No data; expected to be practically odourless.

**Boiling Point:** Not available.

Freezing/Melting Point: No specific data. Solid at normal temperatures. Tralkoxydim melts at 99-104°C.

**Volatiles:**No specific data. Expected to be low at 100°C. **Vapour Pressure:**Negligible at normal ambient temperatures.

Vapour Density: No data. Specific Gravity: No data.

**Water Solubility:** Granules fully dispersed in water; Tralkoxydim is slightly soluble. **pH:** No data, although water dispersions are expected to be slightly acidic.

**Volatility:** Negligible at normal ambient temperatures.

Odour Threshold: No data. Evaporation Rate: No data.

**Coeff Oil/water distribution**: 2.1 at 20°C (log P octanol/water) **Autoignition temp:** Not applicable - does not burn.

# Section 10 - Stability and Reactivity

**Reactivity**: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

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Conditions to Avoid: Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. **Incompatibilities:** strong acids, strong bases, strong oxidising agents.

Fire Decomposition: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: This product will not undergo polymerisation reactions.

### Section 11 - Toxicological Information

Local Effects:

**Target Organs:** There is no data to hand indicating any particular target organs.

### Classification of Hazardous Ingredients

Ingredient Risk Phrases

No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.

**Tralkoxydim:** LD<sub>50</sub> Oral, Rat >2000mg/kg  $LC_{50}$  Inhalation, Rat = >5.1mg/L/4hr

Carcinogenicity: EPA - likely to be carcinogenic to humans; EU - not classified.

Not mutagenic or teratogenic. No reports of adverse reproductive effects. Non sensitiser to guinea pig skin.

NOAEL (rat) 23-30mg/kg/day (2 years) NOEL (dog) 0.5mg/kg/day (1 year)

For the formulated product:

acute oral LD50 rat - female >2000mg/kg acute dermal LD50 rat - male, female >2000mg/kg acute inhalation LC<sub>50</sub> rat > 10 mg/Lskin irritation rabbit Slightly irritating eye irritation rabbit Minimally irritating skin sensitisation guinea pig Not a sensitizer

### **Section 12 - Ecological Information**

The following data is for Tralkoxydim

**Birds:** LD<sub>50</sub> mallard: >3020mg/kg

Fish: LC<sub>50</sub> rainbow trout: >7.2mg/L LC<sub>50</sub> bluegill sunfish: >6.1mg/L

LC<sub>50</sub> mirror carp: >8.2mg/L Algae: EC<sub>50</sub> 7.6mg/L

**Bees:** LD<sub>50</sub> >100μg/bee (contact), >54μg/bee (oral)

Daphnia: EC<sub>50</sub> >75mg/L

Soils: Moderately persistent in soils; degradation is by microorganisms, photolysis and hydrolysis.

DT<sub>50</sub> (aerobic) 3-5 days; (flooded soil) 21 days

Water: DT<sub>50</sub> (Hydrolysis) 6 days at pH 5 and 25°C; 113 days at pH 7 and 25°C; 1594 days at pH 9 and 21°C

DT<sub>50</sub> (photolysis) 19.3 days

Low bioaccumulation potential;  $log K_{ow} = 2.1$ 

## **Section 13 - Disposal Considerations**

Disposal: Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 http://www.chemclear.com.au/ and for help with the disposal of empty drums, contact DrumMuster http://www.drummuster.com.au/ where you will find contact details for your area.

# Section 14 - Transport Information

ADG Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

# Section 15 - Regulatory Information

**AICS:** All of the significant ingredients in this formulation are compliant with NICNAS regulations. The following ingredient: Tralkoxydim, is mentioned in the SUSDP.

### **Section 16 - Other Information**

This MSDS contains only safety-related information. For other data see product literature.

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Acronyms:

**ADG Code** Australian Code for the Transport of Dangerous Goods by Road and Rail (7<sup>th</sup> edition)

AICS Australian Inventory of Chemical Substances

ASCC Office of the Australian Safety and Compensation Council

CAS number Chemical Abstracts Service Registry Number

Hazchem Code Emergency action code of numbers and letters that provide information to emergency

services especially firefighters

IARC International Agency for Research on Cancer

NOS Not otherwise specified

NTP National Toxicology Program (USA)

R-Phrase Risk Phrase

**SUSDP** Standard for the Uniform Scheduling of Drugs & Poisons

UN Number United Nations Number

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 MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This MSDS is prepared in accord with the ASCC document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [ASCC:2011(2003)]

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