



# Material Safety Data Sheet

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Infosafe No. NU0FG Issue Date : December 2002 ISSUED by NUFARM

Product Name : **OPAL DUO**

Classified as hazardous according to criteria of NOHSC

## COMPANY DETAILS

**Company Name** NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)

**Address** 103-105 Pipe Road Laverton North  
Victoria 3026 Australia

**Emergency Tel.** 24hr 1800 033 498

**Tel/Fax** Tel: (03) 9282-1000 Fax: (03) 9282-1001

**Other Information**

## IDENTIFICATION

**Product Code** 1020

**Product Name** OPAL DUO

**Proper Shipping Name** None Allocated

**UN Number** None Allocated

**DG Class** None Allocated

**Packing Group** None Allocated

**Hazchem Code** None Allocated

**Poisons Schedule** S6

**Product Use** For the control of Heliothis on cotton.

## Physical Data

**Appearance** Pale yellow liquid / aromatic odour

**Boiling Point** 224°C

**Vapour Pressure** 0.37mmHg (38°C). For amitraz 0.34mPa(25°C)

**Specific Gravity** 1.02

**Flash Point** >63°C (closed cup)

**Flamm. Limit LEL** 0.6 - 7.0 (solvent only)

## Other Properties

**Vapour Density** >1

**Form** Liquid

**Other Information** Solubility in water: amitraz <0.1mg/L  
Emulsifies on addition to water  
Fire Point 104°C

## Ingredients

Ingredients	Name	CAS	Proportion
	Liquid Hydrocarbons	64742-94-5	637G/L
	Amitraz	33089-61-1	200G/L
	Emulsifiers (non hazardous)		179G/L

## HEALTH HAZARD INFORMATION

### Health Effects

**Acute - Swallowed** The concentrate is of moderate acute toxicity and may be harmful to the gastic system if swallowed. If swallowed, and if vomiting occurs, solvent may enter the lungs which can result in chemical pneumontis.

**Acute - Eye** Contact of the eyes with the concentrate will cause irritation.

**Acute - Skin** Contact of the skin with the concentrate may cause some irritation; defatting of the skin can occur due to the presence of the solvent. May cause transient skin flushing. Harmful when in contact with the skin.



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**Acute - Inhaled** Avoid breathing concentrated vapour. Harmful by inhalation. May cause narcosis.

**Chronic** No evidence of carcinogenic, mutagenic, teratogenic or reproductive effects. Gross skin absorption and ingestion may cause central nervous system depression and no-specific effects.

## First Aid

**Swallowed** If swallowed, do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Center on 13 11 26. Make every effort to prevent vomit from entering the lungs by careful placement of the patient.

The above first aid instructions are mandated by the Commonwealth Department of Health and Aged Care via the National Drugs and Poisons Schedule. These instructions are suitable for ingestion of spray solution and small amounts of concentrate; however, if SUBSTANTIAL AMOUNTS of the CONCENTRATE have been swallowed (more than about 50ml) AND if medical assistance is more than 30 minutes away, the induction of vomiting should be CONSIDERED, preferably based on MEDICAL ADVICE if a physician can be contacted by phone. All care must be taken to prevent vomit from being inhaled. DO NOT give anything by mouth to a semi-conscious or unconscious person.

**Eye** Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek medical advice.

**Skin** Remove contaminated clothing and wash before re-use. Wash affected areas with copious quantities of soap and water. Seek medical advice.

**Inhaled** Remove victim from exposure - avoid becoming a casualty. Seek medical advice if effects persist.

## Advice to Doctor

**Advice to Doctor** Please note that amitraz is NOT an organophosphorous compound. It is an alpha 2 adrenoreceptor agonist.

Symptoms of local overexposure:  
Transient skin flushing and skin rashes due to sensitisation.

Symptoms of systemic poisoning:  
Central nervous system depression ranging from sleepiness to coma, hypotension, bradycardia and hypothermia.

TREATMENT:  
For local contamination, treatment should be symptomatic after decontamination. In case of skin or eye contamination, treat as documented under 'First Aid'.  
For systemic poisoning, initial treatment should be symptomatic and supportive. If a large amount has been ingested, the following measures should be considered:  
Monitor respiratory, cardiac and CNS functions. Observe blood pressure and heart rate. Gastric lavage and charcoal administration, endotracheal intubation and artificial respiration as necessary.  
Anticonvulsant therapy is not appropriate.  
Antidote: Phentolamine or yohimbine. Do not use atropine.  
Recovery is normally spontaneous.  
NB. This product also contains a hydrocarbon solvent. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

## Other Health Hazard Information

## PRECAUTIONS FOR USE



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**Exposure Limits** No exposure standard has been assigned by the National Occupational Health and Safety Commission (Worksafe Australia) for amitraz, or the product. The solvent Manufacturer recommends the following exposure standards:  
For solvent, TLV (TWA) 100ppm.

**Eng. Controls** Use only in well-ventilated areas, natural ventilation is adequate.

## Personal Protection

**Protective Equip.** Avoid contact with the eyes. Wear a face shield. Wear cotton overalls buttoned to the neck and wrist. Wear rubber boots. Wear a washable hat. Wear elbow length PVC gloves. Do not breathe vapour/dust/spray/fumes. Do not eat, drink or smoke until after washing. After each day's use wash personal protection equipment, including gloves, goggles or face shield, respirator face piece and contaminated clothing.

## Flammability

**Fire Hazards** Non flammable.  
Combustible liquid, Class C1.

## SAFE HANDLING INFORMATION

### Storage and Transport

**Storage and Transport** Transport:

Considered non hazardous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Storage:

Protect the product from frost. Store in a cool, well-ventilated, low-fire risk area, away from sources of heat or ignition. Keep out of reach of children. Keep away from food, drink and animal feeding stuffs.

**Proper Shipping Name** None Allocated

### Spills and Disposal

**Spills & Disposal** Contain - prevent contamination of drains and waterways. Use absorbent (soil or sand, sawdust, inert material, vermiculite). Collect and seal in properly labelled drums for disposal. Triple rinse containers, add rinsate to the spray tank, then offer container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. On-site disposal of concentrate is not acceptable.

### Fire/Explosion Hazard

**Fire/Explos. Hazard** Extinguishing media: Water fog, fine water spray, foam or dry agent. Carbon dioxide. Sand. Fire fighters should use self contained breathing apparatus and protective gloves in case of fire. In the case of fire, the material can be violently or even explosively reactive; wear appropriate protection gear. In case of fire, prevent by any means possible spillage from entering drains or water courses. Use water spray to cool fire-exposed containers.

**Hazardous Reaction** No hazards are expected, if the material is handled, stored and used according to instructions and Government regulations. The material is stable under normal conditions. Avoid contact with strong oxidising agents. Hazardous polymerisation is not possible.

**Hazchem Code** None Allocated

## OTHER INFORMATION



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## Toxicology

Toxicity of this product:

Oral LD50 (rat): 1250mg/Kg

Dermal LD50 (rat): ~2000mg/Kg

Inhalation LC50(rat):4.01/4hr mg/L

For Amitraz:

Fish toxicity:

LC50 (Rainbow trout) 0.74mg/L - Testing time: 96Hr.

EC50 (Daphnia Magna) 0.035 mg/L (48hr)

LC50 (Mallard Duck) 7000mg/Kg

LC50 (Japanese quail) 1800mg/Kg

LC50 (Bob-white quail) 788mg/Kg

Harmful to horses

Low toxicity to bees and predatory insects

LD50 (contact) >50 micro g/bee. Earthworm LC50 (14D) >1000mg/Kg

The Australian Acceptable Daily Intake(ADI) of Amitraz for a human is 0.002 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.25 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species.(Ref: Comm. Dept.of Health & Aged Care,TGA, 'ADI List', March 2002).

## Environ. Protection

Do NOT contaminate dams, rivers or streams with pesticide or used containers. Do not use the container for any other purpose. Triple rinse empty container and add rinsate to spray tank. Puncture top, sides and bottom of container and dispose of in an approved manner.

Amitraz has a very short half life of <1 day in soil. It hydrolyses relatively rapidly in water.

## Pkg. & Labelling

The product has been assessed according to the Worksafe criteria for classifying hazardous substances and is classified as hazardous.

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USE.

Risk Phrases:

R20/21/22 Harmful by inhalation, in contact with the skin and if swallowed.

R36/38 Irritating to eyes and skin.

R65 Harmful: May cause lung damage if swallowed.

Safety Phrases:

S2 Keep out of reach of children.

S23 Do not breathe vapour.

S24/25 Avoid contact with skin and eyes.

S36/37/39 Wear suitable protective clothing, gloves, eye/face protection.

S62 If swallowed, do not induce vomiting; seek medical advice and show this container or label if possible.

## CONTACT POINT

### Contact

Normal Hours: Mr Volker Maier

Phone: (03) 9282 1000

After Hours: Shift Supervisor

Phone: 1800 033 498

...End Of MSDS...