



MATERIEL SAFETY DATA SHEET

ZETAVET 20 EC

IDENTIFICATION OF THE SUPPLIER:

AGRO CHEMICALS INDUSTRIES LTD

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PRODUCT IDENTIFICATION:

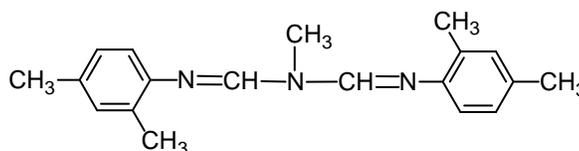
Common Name: Amitraz 20% w/v

Trade Name: Zetavet 20 EC

Chemical Name:

N-methylbis(2,4-xylyliminomethyl)amine

Chemical Formula:



Empirical formula: C₁₉H₂₃N₃

Molecular Weight: 293.4

COMPOSITION/INFORMATION ON INGREDIENTS:

Material	CAS	g/L
Amitraz	33089-61-1	200 g/L
Emulsifier		82 g/L
Solvent		Up to 1 L





HAZARDS IDENTIFICATION:

**Classified as hazardous according to criteria of NOHSC.
Not classified as a Dangerous Good according to the ADG Code**

Risk Phrases: R65 Harmful: may cause lung damage if swallowed.

Safety Phrases: S2 Keep out of reach of children.
S13 Keep away from food, drink and other animal foodstuffs.
S24/25 Avoid contact with skin and eyes.
S36 Wear suitable protective clothing.

FIRST AID MEASURES:

Ingestion: If swallowed do NOT induce vomiting. Give a glass of water. If poisoning occurs, contact a Doctor or Poisons Information Centre.

Eye contact: Immediately hold eyes open and flood with clean water. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. If irritation persists, seek medical advice.

Skin contact: Remove contaminated clothing. Wash skin with soap and water. If skin is irritated, seek medical advice.

Inhalation: Remove to fresh air and observe until recovered. If effects persist, seek medical advice.

Antidote: no specific antidote.

FIRE FIGHTING MEASURES :

Extinguishing media: Combustible liquid (C1) – flash point > 48°C. Extinguish fire using carbon dioxide, foam or dry agent. If not available, use waterfog or fine water spray but ensure all runoff is contained. Contain all runoff.

Hazards from combustion products: On burning will emit toxic fumes. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk to of exposure to vapours or smoke.

Precautions for fire-fighters and special protective equipment: Isolate fire area.

Evacuate downwind residents. Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke or vapours generated.





ACCIDENTIAL RELEASE MEASURES

Emergence procedures / Material and methods for containment and cleanup procedures: Wear protective equipment to prevent skin contamination. In the case of spillage, contain and absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as indicated below or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Wear prescribed protective clothing and equipment. Keep out animals and unprotected persons.

HANDLING AND STORAGE

Precautions for Safe Handling: No smoking, eating or drinking should be allowed where material is used or stored.

When opening the container, preparing the spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield. Wash hands after use.

Conditions for Safe Storage: Not classified as a Dangerous Good. This product is a Schedule 6 Poison (S6) and must be stored, transported and sold in accordance with the relevant Health Department regulations. This product is a combustible liquid (C1) and must be stored away from naked lights, heat sources and oxidising agents. Observe procedures detailed in Australian Standard AS1940-1988 for flammable and combustible liquids.

Store in the closed, original container in a well ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight

EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

No exposure limits have been assigned by NOHSC Australia to the ingredient in this product.

Biological Limit Values:

No biological limit allocated.





EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls:

Use in ventilated areas. Keep containers closed when not in use. No special engineering controls are required.

Personal Protective equipment (PPE):

Skin: When opening the container, preparing the spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves and face shield. Wash thoroughly before smoking, eating or using toilet facilities.

Wash hands after use.

Respiratory Protection: Generally not required. Use of a respirator may be required in certain circumstances to protect from inhalation of spray mist.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Yellowish liquid
Odor:	Aromatic odor.
Specific Gravity:	0.93 at 20°C.
Solubility in Water:	Emulsion in water
Flammability:	Flammable liquid
Corrosive hazard:	Not corrosive.
Flashpoint (°C):	48 °C

STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

Conditions to avoid: Avoid alkaline materials.

Incompatible materials: None.

Hazardous decomposition products: Hazardous decomposition products include hydrogen cyanide, carbon monoxide and nitrogen oxides.

Hazardous reactions: No particular reactions to avoid.





TOXICOLOGICAL INFORMATION

Potential Health Effects:

ACUTE EFFECTS

Swallowed: Swallowing can cause nausea, vomiting and central nervous system depression caused by the solvent in this product. If patient shows sign of central nervous system depression (like those of drunkenness) there is a greater chance of the patient breathing in vomit and causing damage to the lungs. Breathing in vomit may lead to aspiration pneumonia (inflammation of the lung).

Eye: This product may be irritating to the eyes.

Skin: This product may be irritating to the skin. Product will have a degreasing action on the skin. Repeated or prolonged exposure may lead to irritant contact dermatitis.

Inhaled: Inhalation of mists or sprays may produce respiratory irritation. Breathing in vapours may result in headaches, dizziness and possible nausea. Breathing high concentrations can produce central nervous system depression, which can lead to loss of coordination, impaired judgement, and in circumstances of prolonged exposure, unconsciousness.

Toxicological data (active ingredient only):

Acute oral LD50 (rat) = 600-800 mg/kg.

Acute Dermal LD50 (rabbit) > 1600mg/kg.

Acute inhalation LC50 (rat) > 65 mg/L/6 hours.

Acute Skin irritation – Non irritating.

Acute eye irritation – Mild eye irritant.

Acute skin sensitization – not a sensitizer.

Long Term Exposure:

In studies in laboratory animals, amitraz the active ingredient, when fed to rats and mice in long term feeding studies led to fertility effects, including increased oestrus cycles and decreased fertility. However, likely human exposures are very much less than those which produced effects. These effects are unlikely in humans under normal circumstances.

Mutagenic Effects: A variety of tests indicate that amitraz is not mutagenic and does not cause damage to DNA. **Carcinogenic Effects:**





Long term feeding studies show that amitraz is not carcinogenic in rats. However, it can cause tumors in female mice. Amitraz caused an increase in tumors of the lungs and lymph nodes in female mice, but not males, at 57 mg/kg/day over 20 months. A two-year study of female mice also showed an increase in tumors of the liver (hepatocellular tumors) at 57 mg/kg/day amitraz. Because amitraz causes cancer in female mice, but not male mice or male or female rats, it is unclassifiable as to human carcinogenicity.

Organ Toxicity: At high doses, amitraz can reduce the function of the hypothalamus, which helps regulate the metabolism by controlling hormone release in the body.

Fate in Humans and Animals: Available data suggest that amitraz, following absorption into the blood, is not readily absorbed into tissues, and is mostly excreted unchanged via the urine).

ECOLOGICAL INFORMATION

Environmental Toxicology: No data is available on this product. The active ingredient, amitraz, is not slightly toxic to birds. The dietary LC50 (8 day) = 7,000 mg/kg (mallard duck) and 1,800 mg/kg (Japanese quail). The oral LD50 = 788 mg/kg (bobwhite quail). Amitraz may affect reproduction in birds; avian reproduction NOEL is less than 40 mg/kg. Amitraz is moderately toxic to fish. The LC50 (96-hour exposure) = 1.3 mg/L (bluegill sunfish) and 3.2- 4.2 mg/L (harlequin fish). The LC50 (48-hour exposure) = 2.7-4.0 mg/L (rainbow trout). Daphnia exhibited toxic effects at 35 ppb of amitraz in water. Amitraz is relatively non-toxic to bees. The LD50 = 12 µg per bee by ingestion and 3.6 mg/L by direct spraying. Can be toxic to livestock, avoid contact.

Environmental Fate: Amitraz is rapidly broken down in soil containing oxygen. The half-life in soil is less than one day. Degradation occurs more rapidly in acidic soils than in alkaline or neutral soils.

DISPOSAL CONSIDERATIONS

Spills and Disposal: Persons involved in cleanup require adequate skin protection – see section 8. In case of spillage, contain and absorb spilled material with absorbent material such as clay, sand or cat litter and dispose of waste as indicated below or in accordance to the Australian Standard 2507- Storage and Handling of Pesticides. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum,





shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities.

Disposal of empty containers: Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals 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 500 mm 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.

Do not cut or weld metal containers. Vapours that form inside may create an explosion hazard.

