

MATERIAL SAFETY DATA SHEET

SECTION 1 CHEMICAL IDENTIFICATION

Product description: Amitraz 12.5% EC
Company: Sinochem Ningbo
Formula: C₁₉H₂₃N₃
Synonyms: None
Molecular weight: 293.4
CAS RN: 33089-61-1
Use: Acaricide/Insecticide

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient | CAS No. | Proportion (w/v) |
|-------------------|----------------|-------------------------|
| Amitraz | 33089-61-1 | 125 g/L |
| Other ingredients | / | Fill to 1 L |

SECTION 3 HAZARD INFORMATION

Hazard Classification HAZARDOUS SUBSTANCE
NON-DANGEROUS GOODS

Risk Phrases Harmful if swallowed. May cause lung damage if swallowed.

Safety Phrases Do not breathe vapor. Avoid contact with skin. If swallowed do not induce vomiting; seek medical advice immediately and show this container or label.

SECTION 4 FIRST AID MEASURES

Inhalation

Inhalation of this product is a risk. In this event remove from exposure and perform artificial respiration if necessary.

Skin contact

Remove contaminated clothing. Wash affected area immediately with soap and water. Seek medical attention if required.

Eye contact

Flush eye immediately with large amounts of water or normal saline, occasionally lifting eyelids, until no evidence of chemical remains. Seek medical attention if eye irritation persists.

Ingestion

If vomiting occurs keep head lower than hips to help prevent aspiration. Seek medical attention if required.

Advice to doctor

Onset of clinical signs is within 4-6 hours. There is no specific antidote for amitraz. Apply standard decontamination procedures and symptomatic treatment considering possible solvent effects as described below.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media Sprayed water jet, foam, dry powder, CO₂, sand

Fire and Explosion Hazards

Combustible product. Product has a flash point of > 95°C.

Hazardous Combustion Products

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

Fire Fighting

Fight fire in the early stages if safe to do so. Wear respiratory protection. In well ventilated areas wear full face mask with a combination filter. (Offers no protection from carbon monoxide) In enclosed premises: respirator with independent air supply. Contain firefighting water.

SECTION 6 ACCIDENTAL SPIL/RELEASE MEASURES

Use any personal protective equipment. Prevent spillage from spreading or entering soil, waterways and drains. Take up with absorbent material such as sawdust, peat or chemical binder. Fill material along with any contaminated soil etc., into sealable containers. Clean affected area with an aqueous detergent and a small amount of water. Absorb this with hydrated lime and place in a sealable container. Spread hydrated lime over the affected area. On completion of clean-up remove and wash all protective clothing and equipment with detergent and water. Place cleaning materials into the same container. Do not eat, drink or smoke during clean-up operation.

SECTION 7 HANDLING AND STORAGE

Safe Handling

Pour the product using a funnel or other equipment to avoid splashing and gugging. Suitable container materials: HDPE, LDPE.

Storage

Keep out of reach of children. Store away from food, drink or animal feeding stuffs. To maintain product quality, store below 30°C. Keep away from heat or moisture. This material is a Schedule 6 poison and must be stored, handled and used in accordance with the relevant regulations.

SECTION 8 EXPOSURE CONTROL/PERSONAL PROTECTION

Ventilation

Ensure adequate ventilation during use to prevent build-up of fumes. Do not inhale spray mist.

Eye Protection

May irritate the eyes. Avoid contact with eyes and skin. Do NOT inhale spray mist. If product in eyes, wash out immediately with water. Wear a face shield while handling the concentrate.

Skin Protection

May irritate the skin. When preparing dip or spray, using prepared dip or spray, wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length PVC gloves, and face shield. If product on skin, immediately wash area with soap and water. Wash hands before breaks and at end of work.

Respirator

No respirator is required under normal conditions of use.

Protective Material Types

PVC, rubber

General Advice

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, face shield and contaminated clothing. Product is poisonous if swallowed.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow to yellow-brown clear liquid

Odor: Slight characteristic smell

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| Boiling point: | 215 – 300°C |
| Specific Gravity: | approx 1.00 – 1.02 kg/L at 20°C |
| Vapor pressure: | 0.005 hPa at 20°C (amitraz) |
| Flash point: | > 95°C |
| Solubility in Water: | Emulsifiable |
| Viscosity | Not available |
| Volatility | Not available |

SECTION 10. STABILITY AND REACTIVITY

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|-------------------------------|-------------------------------|
| Chemical Stability | Product is chemically stable. |
| Conditions to Avoid | Avoid oxidizing agents. |
| Incompatible Materials | None |

Hazardous Decomposition

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

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| Hazardous Reactions | None |
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SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity/Irritation Studies (End product):

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| Oral: | LD50: rat 2123 mg/kg |
| Dermal: | LD50 (rabbit) > 2000 mg/kg |
| Inhalation: | LC50 (4 h) for rats > 2.07 mg/L air |
| Eye contact: | Slightly irritating to eyes of rabbits. |
| Skin Contact: | Slightly irritating to skin of rabbit. |
| Skin Sensitization: | Not a skin sensitizer (Guin) |

Other studies (for amitraz technical):

NOEL: In 2 y feeding trials, no adverse effect observed in rats receiving 50 – 200 ppm diet, or in dogs dosed 0.25 mg/kg daily. Human NOEL > 0.125 mg/kg daily.

SECTION 12 ECOLOGICAL INFORMATION

Acute toxicity: (Data for Amitraz Technical)

Birds: LD50 for bobwhite quail 788 mg/kg. LC50 (8 d) for mallard ducks 7000, Japanese quail 1800 mg/kg.

Fish: LC50 (96 h) for rainbow trout 0.74, bluegill sunfish 0.45 mg/kg. Due to rapid hydrolysis, it is unlikely that this toxicity will be expressed in natural aquatic systems.

Daphnia: LC50 (48 h) 0.035 mg/l.

Algae EC50 for *Selenastrum capricornutum* > 12 mg/l.

Bees: Low toxicity to bees and predatory insects. LD50 (contact) 50 µg/bee (formulation).

SECTION 13 DISPOSAL INFORMATION

Disposal of unwanted spraywash should be into a pit of adequate size on level ground and away from watercourses, drains, dams, and tree roots. Triple or (preferably) pressure rinse empty containers, adding rinsate to spray wash. Do not dispose of undiluted chemicals on site. If not available bury containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Empty containers and product should not be burnt.

SECTION 14 TRANSPORTATION INFORMATION

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| UN No | Not classified |
| UN Proper Shipping Name | Not classified |
| Class & Subsidiary Risk | Not classified |
| Packaging Group | Not classified |

Hazchem Code

Not classified

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| SECTION 15. REGULATORY INFORMATION |
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Poisons Schedule

Schedule 6

APVMA Registration

The product is registered by the APVMA.

Labelling

All necessary directions, precautions and warnings for normal use of the product are included on the product label.

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| SECTION 16 OTHER INFORMATION |
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Revised date:

August 18, 2012

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 should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.