



# Material Safety Data Sheet

## PARSEC

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### 1. PRODUCT AND COMPANY IDENTIFICATION

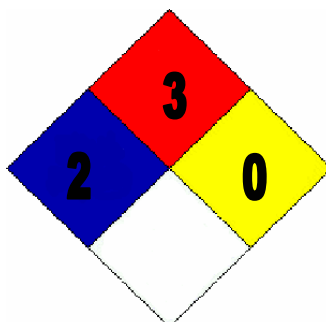
- Product Name: PARSEC
- Use : Acaricide, insecticide (amidine)
- Manufacturer: MILENIA AGRO CIÊNCIAS S.A.  
Address: Rua Pedro Antonio Souza, 400 – Londrina -PR  
E-mail: [milenia@milenia.com.br](mailto:milenia@milenia.com.br) <http://www.milenia.com.br>
- Emergency Number: 0800 –400 75 05 – Londrina - PR  
Fax: (0XX43) 3371-9011

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

- Chemical Nature: This product is formulated.

<u>Components</u>	<u>CAS number</u>	<u>Concentration %</u>	<u>Molecular Formula</u>
N-methylbis (2,4-xylyliminomethyl) amine	33089-61-1	200 g/L	C <sub>19</sub> H <sub>23</sub> N <sub>3</sub>
Dimethylbenzene	1330-20-7	Approx. 34% <i>m/v</i>	C <sub>6</sub> H <sub>14</sub> (CH <sub>3</sub> ) <sub>2</sub>

- Synonyms: Amitraz, amitraze, Xylene, Xyrol
- Ingredients or impurities contributing to hazard: the product has aromatic solvent as solvent in the formulation. The other compounds of the formulation are not classified as hazardous.
- NFPA labeling:



### 3. HAZARDS IDENTIFICATION

- Main hazards: the product may be toxic to men and to the environment if not used as recommended.



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### ● Product Effects:

Adverse health effects to human: amitraz is a Central Nervous System depressor and when there is systemic absorption, it causes capillary vasodilation.

Environmental Effects: the product is toxic to aquatic organisms, earthworms and may cause their death.

Physicochemical hazards: flammable product 1B.

Specific hazards: there are no other hazards related to the product.

● Main Symptoms: the product may cause hypotension, bradycardia, hypothermia, ataxia, depression and in more serious case, coma. Due to the presence of aromatic solvent, it may occur nausea, vomiting, diarrhea, chronic headache, dizziness, sedation and incoordination.

## 4. FIRST AID MEASURES

● First Aid Measures: remove to fresh air. Remove all contaminated clothing and wash the affected parts of the body thoroughly with plenty of water during 30 minutes. If victim is unconscious and not breathing, apply artificial respiration or oxygenation. Take victim to the nearest medical care center, with this sheet.

● Inhalation: remove to fresh air. If stops breathing, apply artificial respiration. If breathing is difficulty, immediately call a physician.

● Skin contact: immediately wash with water during 30 minutes after removing contaminated clothing. In case of effects/symptoms, call a physician. Wash the contaminated clothing prior to reuse them and dispose contaminated shoes.

● Eye contact: immediately rinse with plenty of running water for at least 30 minutes. Call a physician.

● Ingestion: do not induce vomiting, but do not stop if it happens spontaneously. Call a physician immediately. WARNING: never give anything by mouth to an unconscious person.

● Actions to be avoided: do not apply mouth to mouth respiration if the patient has swollen the product. Give artificial respiration.

● Protection for the first aid givers: avoid skin or inhalation contact with the product during the process.

● Notes for the physician: no specific antidote is available. If large amounts was swallowed, gastric emptying procedures as gastric lavage may be performed, taking great care to avoid pulmonary aspiration due to the risk of chemical pneumonitis. Activated charcoal and saline laxatives may be administered due to probable active ingredients adsorption to activated charcoal. Symptomatic treatment must include, specially, support measures as the correction of hydroelectrolytic and metabolic disorders, as well as respiratory aid. The management of hepatic and renal functions must be kept. If in eye, rinse them with physiological saline followed by



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occlusion and lead to ophtalmic evaluation. There is a paper reporting the results of yohimbine in the reversion of amitraz effects within cardiac, gastrointestinal and CNS ambit. (HSU & MCNEEL 1985).

### 5. FIRE FIGHTING MEASURES

- Extinguishing media: foam, CO<sub>2</sub>, dry chemical and, in last case, water.
- Special Procedures: wear appropriate PPE (personal protective equipment) to avoid direct contact with the product. PVC overall, rubber gloves and rubber boots are recommended. Wear self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions: wear waterproof overalls, safety goggles, rubber boots and nitril rubber, latex or PVC gloves. Respiratory protection must be used depending on the concentrations in the environment or on the extension of the spill/release. In this case, choose self-contained breathing apparatus.

Removal of ignition sources: stop electric energy and turn off the sources that may produce sparks. Remove all the material that may start a fire (for example: spilled diesel oil).

Dust control: not applicable as it is a liquid.

Inhalation, skin, mucous membrane and eyes contact prevention: wear the garments and accessories described above.

- Environmental precautions: avoid contamination of surface waters sealing the entrance of the rain water galleries (culverts). Do not allow the residues of released product reach water collections, building dikes with earth, sand or any other absorbing material.
- Cleaning methods: stop and collect the spill with non-combustible absorbing materials (e.g. sand, earth, vermiculite, diatoms earth). Put the residues into a recipient for disposal according to the local regulations. Clean, preferably with a detergent; avoid using solvents.
- Secondary hazards prevention: do not allow the product contaminates creeks, lakes, water fountains, wells, sewers, pluvial sewers and effluents.

### 7. HANDLING AND STORAGE

- Handling:
  - Technical measures: wear PPE as described on item 8. Keep people, and specially children and domestic animals away from the place of work. Do not have direct contact with the product. Avoid leaks or contamination of the application equipment, during its supply.

Workers exposure prevention: wear PPE as described on item 8. Do not eat, drink or smoke during product handling. When opening a packaging, do it in a way to avoid leaks. Do not use damaged and/or defective personal protective and application equipment. Do



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not unstop nozzles, holes, tubulations or valves of application equipment with the mouth. Do not manipulate and/or carry damaged packaging.

Safe handling precautions: wear PPE as described on item 8. Do not apply the product in the hottest hours of day, against or in the presence of strong winds, in a way to avoid its drift.

● Guidance to a safe handling: wear PPE as described on item 8. Handle the product with appropriate local exhaustion or in a well ventilated area. If handled in open environments, do it in the same direction as of wind. Apply only the manufacturer's recommended dose. In case of intoxication symptoms, immediately stop the work and proceed as described on item 4 of this sheet.

### ● Storage

● Appropriate technical measures: keep the product in its original recipient. Keep eventual residues of the product in its original packaging, appropriately closed.

### ● Storage conditions

Appropriate: keep the recipient appropriately closed, at room temperature and protected from light. Keep it in a duly identified, exclusive place for toxic products. Lock the place to avoid the access of unauthorized persons and children.

Avoid: humid places and places with sources of heat.

Incompatible products and materials: do not store with food, beverages, including those intended for animal use.

### ● Safe materials for packaging

Recommended: product already packed in an appropriate packaging.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

● Engineering controls: whenever applicable use ventilators, air circulators, exhausters appropriate for flammable gases and vapors; provide the work area with appropriate ventilation. The operator must always use breathing protection equipment, even when there is a good and natural or mechanical ventilation.

### ● Specific control parameters:

#### Occupational exposure limits:

Common name	Exp. Limit	Type	Effect	References
Amitraz	None established	TLV/TWA	---	NR 15,1994 and ACGIH, 2002
Dimethylbenzene (Xylene)	78ppm(340mg/m <sup>3</sup> )	LT	---	NR 15, 1994
	100ppm	TLV-TWA	Irritation	ACGIH 2002
	150ppm	TLV-STEL		



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### Biological indicators:

Common name	Biological Limit	Type	Notes	References
Amitraz	None established	BEI	---	NR 7, 1994 and ACGIH 2002
Xylene Methyl Hippuric acid (Urine)	1.5 g/g creatinine	BEI	End of job	

### ● Personal protective equipment:

Breathing protection: wear rubber or silicone masks with chemical filter for pesticides combined with mechanical filter for class P2 particles.

Hands protection: wear nitril rubber PVC, latex or other waterproof and tear/perforation resistant material gloves.

Eye protection: wear safety goggles for chemical products.

Skin and body protection: wear long sleeve waterproof or hydro-repellent overalls and PVC boots.

Special Precautions: keep PPE duly clean and in adequate use conditions, performing inspections and possible maintenance and/or substitution of damaged/deffective equipment and parts from time to time.

Hygiene measures: take shower and change the clothing after using the product. Wash contaminated clothing separately, avoiding its contact with another personal use tools.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form: liquid
- Color: yellowish to amber
- Odor: characteristic
- pH: 6.5 – 7.5 at 20°C
- Boiling point: not applicable
- Melting point: not applicable as it is liquid.
- Flash point: 23 at 27 °C
- Upper/Lower explosion limits: the product is not explosive
- Density: 0.940 to 0.950 g/mL at 20°C
- Solubility: emulsifiable in water.
- Viscosity: 10 cps at 25°C

## 10. STABILITY AND REACTIVITY

- Chemical stability: the product is stable under normal temperature and storage conditions.



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- Hazardous reactions: there is no hazardous reaction known.
- Hazardous decomposition products: fire produces carbon monoxide, carbon dioxide, nitrous oxide and other non-identifiable organic substances.

### 11. TOXICOLOGICAL INFORMATION

- Acute toxicity:  
Oral LD50 in rats: 1,900 mg/kg  
Dermal LD50 in rats: > 12,000 mg/kg
- Local Effects:  
Skin irritation in rabbits: the product is considered moderately irritating.  
Eyes irritation in rabbits: the product is considered non irritating
- Sensitization: the product caused medium to strong intensity reactions in 100% of used animals.
- Chronic toxicity:  
Mutagenicity: the product is considered non-mutagenic.  
Carcinogenicity: the active ingredient is considered non-carcinogenic.  
Teratogenicity: the active ingredient is considered non-teratogenic.  
Reproductive effects: the active ingredient is considered as having no reproductive effect.

### 12. ECOLOGICAL INFORMATION

- Environmental, behavioral effects and impact of the product:  
Mobility: amitraz is moderately movable in sandy-clay, medium texture and in clay and it is very movable in sandy soil.  
Persistence/Degradability: amitraz is rapidly degraded (half-life in soil: 20 minutes to 1 (one) day. Degradation occurs through hydrolysis, photodegradation and microbial degradation (aerobic and anaerobic).  
Bioaccumulation: there is no indication that amitraz accumulates in mammals.  
Ecotoxicological information:  
Toxicity to fishes: ( *Brachydanio rerio* ) LC<sub>50</sub> (96hs) = 0.014 mg/L  
Toxicity to birds: Mallard ducks : LC<sub>50</sub> (8 days): 7,000 mg/Kg



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Toxicity to earthworms: (*Eisenia foetida*) LC<sub>50</sub> (14 days) = 7.46 mg/Kg

Toxicity to algae: (*Chlorella vulgaris*) EC<sub>50</sub> (96hs) = 62.16 mg/L

Toxicity to microcrustaceous: (*Daphnia similis*) EC<sub>50</sub> (48hs) = 0.32ppm

### 13. DISPOSAL CONSIDERATIONS

● Treatment and disposal methods:

Product: inactivate the product through incineration in ovens designed to this kind of operation, equipped with chambers to wash effluent gases that are according to the competent authority regulations.

Product residues: keep eventual residues of the products and/or products with expiration date expired in their original packaging, duly closed.

Used packaging: empty packaging must be submitted to triple washing and then stored in the safe place to be returned to the shop where they were acquired within one year. Do not burn, nor bury the packaging. The specific State and Municipal legislation must be obeyed. The State or Municipal environmental agency must be consulted.

### 14. TRANSPORTATION INFORMATION

● National and international regulations:

(ADR) Classification UN 1993  
number  
(Ground transport)

<b>Proper shipping name:</b>	Flammable liquid , N.E. (Xylol)
<b>Class:</b>	3
<b>Hazard number:</b>	30
<b>Packaging group:</b>	III
<b>Special provision:</b>	102, 109
<b>Quantity Limits</b>	NA
<b>(Excepted quantity:</b>	

IATA Classification UN 1993  
number:  
(Air Transport)

<b>Proper shipping name:</b>	Flammable liquidd, N.E. (Xylol)
<b>Class:</b>	3
<b>Hazard number:</b>	30
<b>Packaging group:</b>	III
<b>Passanger aircraft:</b>	Packaging instructions: 309
	Max. Quantity per packaging: 60 L
	As limited quantity , Y309
	Packaging Instructions:



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<b>Cargo aircraft:</b>	Max. Quantity per packaging	10 L
	Packaging instructions:	310
	Max. Quantity per packaging:	220 L
	Special provision:	NA

**I.M.O. Classification UN number:**  
(Maritime Transport) 1993

<b>Proper shipping name</b>	Flammable liquid, N.E. (Xylol)
<b>IMO Class:</b>	3.3
<b>IMDG Page:</b>	3126, 3230, 3345
<b>EmS number:</b>	3-07
<b>MFAG Table:</b>	NA
<b>Marine Pollutant:</b>	<b>Marine Pollutant</b>
<b>Class:</b>	3
<b>Hazard number:</b>	30
<b>Packaging group:</b>	III

Ground Transportation: Ordinance 204 of Ministry of Transportation (Brazilian Law) and ADR.

Air Transportation: IATA (International Air Transport Association, Dangerous Goods Regulations).

Maritime Transportation: I.M.O. (International Maritime Dangerous Goods Code)

NA : Not applicable

## 15. REGULATORY INFORMATION

● Regulations:

● Information on risk and safety according to the label:

Avoid environmental contamination – Preserve the Nature.

Do not use leaking equipment.

Apply only the manufacturer's recommended doses.

Do not wash packaging or application equipment in lakes, fountains, rivers and other water courses.

Discard the packaging and residues of the product correctly. Follow the instructions contained in the item of Disposal Considerations.

## 16. OTHER INFORMATION

"This Sheet was elaborated by [TOXICLIN® Consultoria e Serviços Médicos](#), from the data provided by the registering Company. The information of this MSDS represents the present data and reflect, precisely, our best knowledge for the appropriate handling of this product according to the specific application in the label and literature. Any other use of the product that are not recommended is a responsibility of the user".