



# Safety Data Sheet

SDS No.:  
SDS-P/WP-T/01

Tapisan

Revision: 0, 1<sup>st</sup> Issue

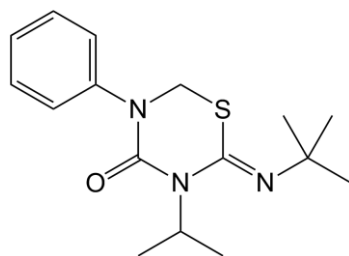
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## Section 1: Identification of the Hazardous Chemical and of the Supplier

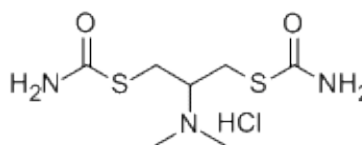
### 1.1 Product Identifier

Product Name: Buprofezin 10% + Cartap Hydrochloride 50%WP  
Trade Name: Tapisan  
Active Ingredient: (EZ) -2-tert-butylimino-3-isopropyl-5-phenyl-1,3,5-thiadiazinan-4-one (Buprofezin)  
*S,S'* -(2-dimethylaminotrimethylene) bis(thiocarbamate) hydrochloride (Cartap Hydrochloride)  
CAS No.(AI): 69327-76-0 (Buprofezin)  
15263-52-2 (Cartap Hydrochloride)

Structural Formula:



Buprofezin



Cartap Hydrochloride

Recommended Usage: Insecticide

### 1.2 Supplier's Information

Address: Agricultural Chemicals (M) Sdn. Bhd.  
962, Lorong Perusahaan 8  
Taman Perindustrian Perai  
13600 Perai , Pulau Pinang  
Malaysia  
Tel.: +6-04-3907988  
Fax: +6-04-3905703  
Web: [www.agrichem.com.my](http://www.agrichem.com.my)  
Emergency Phone: +6-04-3907988

## Section 2: Hazard Identification

Classification: Acute toxicity, oral category 4  
Eye damage category 1  
Specific target organ toxicity – single exposure category 1 (CNS)  
Specific target organ toxicity – repeated exposure category 2  
Acute aquatic toxicity category 1  
Chronic aquatic toxicity category 1

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Pictogram:



Signal Word: Danger

Hazard Statement:

H302	Harmful if swallowed
H318	Causes serious eye damage
H370	Causes damage to central nervous system.
H373	May cause damage to organs through prolonged and repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Precautionary Statement:

P264	Wash exposed body parts thoroughly after handling
P280	Wear rubber gloves, protective clothing, safety goggles and face protection
P260	Do not breathe dust
P270	Do not eat, drink or smoke when using this product
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing
P273	Avoid release to the environment

### Section 3: Composition and Information of the Ingredients of the Hazardous Chemical

Component	CAS No.	Weight, %	Hazard Code
Buprofezin	69327-76-0	10%	H412
Cartap Hydrochloride	15263-52-2	50%	H302, H332, H370, H400, H410
Stabilizer	-	<5%	H319
Surfactant 1	-	< 10%	H226, H318, H335, H372, H411
Surfactant 2	-	< 5%	H302, H315, H318
Carrier 1	-	< 10%	H319
Carrier 2	-	Balance	H319

### Section 4: First-aid Measures

Call a POISON CENTER or doctor/physician if you feel unwell.



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Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin Contact:	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye Contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion:	DO NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.
Symptoms:	Muscular fibrillation, tremor, ataxia, limb paralysis, irregular respiration, salivation, urinary incontinence, hyperexcitability, choreoathetotic syndrome and decrease of spontaneous activity.
Notes to Physician:	Treatment is symptomatic

## Section 5: Fire-fighting Measures

Suitable Extinguishing Media:	Water, Carbon dioxide (CO <sub>2</sub> ), chemical foam, dry chemical
Specific Hazard During Fire:	Evolves NO <sub>x</sub> and CO <sub>x</sub> . Will form explosive mixture with air.
Special Protective Equipment:	Fire fighters should wear full-faced self-contained breathing apparatus and protective clothing.

## Section 6: Accidental Release Measures

Personal Precautions:	Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
Environmental Precautions:	Avoid release to the environment.
Method for Cleaning Up:	Wear protective clothing as indicated in Section 8. Evacuate non essential personnel. Collect the spill into waste container for disposal. Wash the contaminated area with a little water and detergent. Adsorb with inert material such as clay or earth. Collect into the same container for disposal. Prevent the spillage from entering local drainage system.

## Section 7: Handling and Storage

Precautions for Safe Handling:	Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust. Do not eat, drink or smoke when using this product. Avoid release to the environment.
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Conditions for Safe Storage: Store in a well ventilated place. Keep away from heat/sparks/open flames/hot surfaces - No smoking. Keep container tightly closed.

Incompatibles: Incompatible with strong oxidizing agents, strong acids and alkaline materials.

## Section 8: Exposure Control and Personal Protection

Exposure Limit:

Source	Component	CAS No.	Limit	
JAIH	Buprofezin	69327-76-0	2mg/m <sup>3</sup>	
	Cartap Hydrochloride	15263-52-2	No data	
	Stabilizerr		No data	
	Surfactant 1		No data	
	Surfactant 2		No data	
	Carrier 1	-	TWA	10mg/m <sup>3</sup>
OSHA	Carrier 1	-	STEL-TWA	6mg/m <sup>3</sup> (<1%)
ACGIH	Carrier 1	-	STEL-TWA	10mg/m <sup>3</sup> (<1%)
NOISH	Carrier 1	-	STEL-TWA	6mg/m <sup>3</sup> (10hrs)
OSHA	Carrier 2	-	TWA total particulate	15mg/m <sup>3</sup>
OSHA	Carrier 2		TWA respirable fraction	5mg/m <sup>3</sup>
ACGIH TLV	Carrier 2		TWA respirable dust	2mg/m <sup>3</sup>
NIOSH REL	Carrier 2		TWA total particulate	10mg/m <sup>3</sup>
NIOSH REL	Carrier 2		TWA respirable fraction	5mg/m <sup>3</sup>

Engineering Control: Local exhaust ventilation

Individual Protection Measure: Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust. Wash exposed body parts thoroughly after handling.

Personal Protective Equipment:

Eye Protection: Protective goggles

Skin Protection: Face shield, rubber gloves and boots

Respiratory Protection: Respirator

## Section 9: Physical and Chemical Properties

Appearance: Off-white powder

Odour: Characteristic odour

Odour Threshold: No data available

pH: 3 - 7 (10% Suspension)

Melting/Freezing Point: 187.8°C (Cartap HCl)

Initial Boiling Point: No data available

Boiling Range: No data available



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Flash Point:	Not applicable
Evaporation Rate:	No data available
Flammability:	Flammable liquid
Upper Flammability Limit:	No data available
Lower Flammability Limit:	Particulate explosive lower limit: 130 g/m <sup>3</sup> (<75µm)
Vapour Pressure:	4.2 x 10 <sup>-5</sup> Pa at 20°C (Buprofezin) 2.5 x 10 <sup>-5</sup> Pa at 25°C (Cartap HCl)
Vapour Density:	No data available
Relative Density:	0.4 – 0.7 (Bulk Density)
Solubility in Water:	Miscible with water
Partition Coefficient P <sub>o/w</sub> :	4.8 (Buprofezin) 0.43, 25°C, pH 4.1 (Cartap HCl)
Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available
Viscosity:	No data available

## Section 10: Stability and Reactivity

Reactivity:	Evolves NO <sub>x</sub> and CO <sub>x</sub> . Will form explosive mixture with air.
Chemical Stability:	The material is stable under normal storage condition.
Hazardous Reaction:	No data available.
Condition to Avoid:	Direct sunlight, high humidity, moisture, heat ad extreme temperature, accumulation of static electricity.
Incompatible Material:	Incompatible with strong oxidizing agents, strong acids and alkaline materials.
Hazardous Decomposition Product:	Carbon monoxide, carbon dioxide, hydrocarbons, sulfur oxides, nitrogen oxides, ammonia, soot.

## Section 11: Toxicological Information

### 11.1 Acute Toxicity

Component: Buprofezin		
Ingestion, Oral LD <sub>50</sub> :		
	Rat (female)	2355mg/kg
	Rat (male)	2198mg/kg
Skin Contact, Dermal LD <sub>50</sub> :		
	Rat (male / female)	> 5000mg/kg
Inhalation, LC <sub>50</sub> :		
	Rat (male / female)	> 4.57 mg/L (4 hours)
Component: Cartap Hydrochloride		
Ingestion, Oral LD <sub>50</sub> :		
	Rat	325mg/kg
	Mouse	150mg/kg



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Skin Contact, Dermal LD <sub>50</sub> :		
	Rat	> 2000mg/kg
Inhalation, LC <sub>50</sub> :		
	Rat, Dust/Mist, 4hr	3.5mg/L
Component: Stabilizer		
Ingestion, Oral LD <sub>50</sub> :		
	Rat	5400mg/kg
Skin Contact, Dermal LD <sub>50</sub> :		
	Rat	> 2000mg/kg
Component: Surfactant 1		
No data		
Component: Surfactant 2		
Ingestion, Oral LD <sub>50</sub> :		
	Rat	≥ 1400mg/kg

## 11.2 Chronic Effect from Short and Long Term Exposure

Skin Contact:	Not irritant
Eye Contact:	Causes serious eye damage
Inhalation:	No data
Ingestion:	Harmful if swallowed
Carcinogenicity:	No data available
Mutagenicity:	No data available
Teratogenicity:	No data available

## 11.3 Symptoms

Muscular fibrillation, tremor, ataxia, limb paralysis, irregular respiration, salivation, urinary incontinence, hyperexcitability, choreoathetotic syndrome and decrease of spontaneous activity.

## Section 12: Ecological Information

### Ecotoxicity:

Component: Buprofezin		
Acute Toxicity:		
	Bluegill sunfish, LC <sub>50</sub> , 96hr	> 0.33mg/L
	Daphnia EC <sub>50</sub> , 48 hr	> 0.42mg/L
	Algae EbC <sub>50</sub> , 72 hr	49mg/L
Component: Cartap Hydrochloride		
Acute Toxicity:		
	Common carp, LC <sub>50</sub> , 96hr	0.6mg/L
	<i>Daphne magna</i> , EC <sub>50</sub> , 48 hr	0.065mg/L
	Green algae ErC <sub>50</sub> , (0-72 hr)	9.3mg/L
Chronic Toxicity		
	Green algae, NOECr (0-72hr)	< 0.52mg/L

Persistence and Degradability:	No data available
Bioaccumulative Potential:	No data available
Mobility in Soil:	No data available
Other Adverse Effect:	No data available



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## Section 13: Disposal Information


Dispose of contents/container to Kualiti Alam / authorized body by DOE.

## Section 14: Transportation Information

<b>Land (ADR/RID)</b>	
Proper Shipping Name	Pesticide, Solid, Toxic, N.O.S.
Hazard Class	6.1
Hazchem Code	-
UN number	2588
Packing Group	III
Label / Mark	6
<b>Sea (IMDG)</b>	
Proper Shipping Name	Pesticide, Solid, Toxic, N.O.S.
Hazard Class	6.1
UN Number	2588
Packing Group	III
Marine Pollutant	-
Label	6
Transport Document Name	-
<b>Air (IATA)</b>	
Proper Shipping Name	Pesticide, Solid, Toxic, N.O.S.
Hazard Class	6.1
UN number	2588
Packing Group	III
Label / Mark	6
Transport Document Name	-

## Section 15: Regulatory Information

Classification: Acute toxicity, oral category 4  
Eye damage category 1  
Specific target organ toxicity – single exposure category 1 (CNS)  
Specific target organ toxicity – repeated exposure category 2  
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Signal Word: Danger

Pictogram:



Pesticides Act:  
Classification: Class III  
Harmful

#### Section 16: Other Information

Date of Preparation: 6 November 2015  
Date of Revision: -  
Reference Document: ICOP on Chemicals Classification and Hazard Communication 2014  
GHS Purple Book  
MSDS

Disclaimer: To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.