

Preparation Date 20-Dec-2016

Revision Date 20-Dec-2016

Revision Number 01

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product Identifier

**Product Description** Buprofezin 25% SC

### Other means of Identification

**UN-No** UN 3082

### Recommended use of the chemical and restriction on use

**Recommended use** Insecticide

**Uses advised against** Activities contrary to label recommendations

### Details of the Supplier of the Safety Data Sheet

#### **Supplier Address**

**UPL Limited**  
Uniphos House, Madhu Park,  
Khar (W), Mumbai, India  
Tel: +91-(022)- 2646-8000

**E-mail address** info.in@uniphos.com

### Emergency Telephone Number

**Company Phone Number** +91-(022)- 2646-8000  
**Emergency telephone number** +91-(022)- 2646-8000 (From 9:00 A.M. to 8:00 P.M.)

## 2. Hazard Identification

### Classification

Acute Toxicity Oral	Category 5- (H303)
Acute Toxicity Dermal	Category 5- (H313)
STOT - Repeated Exposure	Category 2 (blood system, liver, kidney, thyroid, brain) - (H373)
Aquatic Acute Hazard	Category 2 - (H401)
Aquatic Chronic Hazard	Category 2 - (H411)

### Label elements

**Signal word****Warning**

#### **Hazard Statements**

**H303** - May be harmful if swallowed.

**H313** - May be harmful in contact with skin.

**Preparation Date** 20-Dec-2016**Revision Date** 20-Dec-2016**Revision Number** 01

**H373** - May cause damage to organs through prolonged or repeated exposure (blood system, liver, kidney, thyroid, brain)

**H411** - Toxic to aquatic life with long lasting effects.

**Precautionary Statements****Prevention**

**P260** Do not breathe dust/fume/gas/mist/vapour/spray

**P280** Wear protective gloves/protective clothing/eye protection/face protection.

**P273** Avoid release to the environment.

**Response**

**P312** Call a POISON CENTRE or doctor/physician if you feel unwell.

**P314** Get medical advice/attention if you feel unwell.

**P391** Collect Spillage

**Storage**

**P403+P235** Store in a well-ventilated place. Keep cool

**Prevention**

**P501** Dispose of contents/container to an approved waste disposal plant

**Other Information**

No other hazards known.

**3. Composition/information on Ingredients**

Chemical name	CAS-No	W/W %
Buprofezin	69327-76-0	20-25

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

**4. First aid measures****First-aid measures****Eye contact**

Hold eyes open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.

**Skin contact**

Remove contaminated clothing and shoes immediately, then wash with plenty of water. Clean contaminated clothing and shoes before re-use or discard if they cannot be thoroughly cleaned. If skin irritation or rash occur, get medical attention.

**Ingestion**

Rinse mouth. Never give anything by mouth to an unconscious person. Do not induce vomiting unless told by physician. If vomiting occurs ensure patient can breathe. If you are feeling unwell, get medical attention.

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. If you feel unwell, get medical attention.

**Most Important Symptoms and Effects, Both Acute and Delayed****Most Important Symptoms and Effects**

The most important known symptoms and effects are described in the labelling (See section 2) and/or in section 11.

**Indication of immediate medical attention and special treatment needed**

Preparation Date 20-Dec-2016

Revision Date 20-Dec-2016

Revision Number 01

Notes to physician Treat symptomatically and supportively.

**5. Fire-fighting measures****Extinguishing media****Suitable extinguishing media** Water spray, alcohol-resistant foam, dry chemical or carbon dioxide**Unsuitable extinguishing media** High pressure water jets may scatter and spread fire**Special hazards arising from the substance or mixture****Special Hazard** Thermal decomposition can lead to release of irritating or toxic fumes (or gases) in fire.**Hazardous combustion products** Carbon oxides, Nitrogen oxides (NO<sub>x</sub>) , Sulphur Oxide (SO<sub>x</sub>)**Protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus and protective suit. Use standard firefighting procedures and consider the hazards of involved material.

**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures****Personal Precautions** Do not eat, drink or smoke while using this product. Do not breathe dust/mist/fume/gas /vapors. Avoid contact with skin and eyes. Keep unnecessary people away. Isolate area. Keep out of low areas.**Environmental precautions** Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.**Methods and material for containment and cleaning up****Methods for Clean-Up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, Sawdust).**Reference to other sections** Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.**7. Handling and Storage****Precautions for safe handling****Handling** Wear Suitable protective equipment. Avoid contact with skin and eyes. Avoid breathing vapour or mist . Ensure adequate ventilation. Wash thoroughly after handling. Avoid release to environment. Empty containers may contain hazardous residues. Do not reuse empty container.**Conditions for safe storage, including any incompatibilities****Storage** Store in accordance with local regulation. Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep away from incompatible material. Do not store in unlabelled containers. Do not store material near food, feed or drinking water.**Incompatible materials** No materials to be specially mentioned.

## 8. Exposure Controls/Personal Protection

### Exposure Guideline

Apply technical measures to comply with the occupational exposure limit.

Chemical name	Japan
Buprofezin technical	TWA: 2 mg/m <sup>3</sup>

### Engineering controls

Ensure adequate ventilation, especially in confined areas. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Personal protective equipment

#### Eye/Face Protection

Avoid contact with eyes. Where there is potential for eye contact have eye flushing equipment available. Tightly fitting safety goggles. Face-shield.

#### Skin/Hand protection

Wear protective gloves/clothing. Long-sleeved clothing

#### Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

#### Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Local authorities should be advised if significant spillage cannot be contained.

### General hygiene considerations

Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

Appearance	Off-white suspension
Physical state	Liquid
Odor	Characteristic
Color	Off-white
Odor threshold	No information available.

Property	VALUES	Remarks/ Method
pH	7-8	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	>100°C	
Flammability (solid, gas)	Not applicable	
Upper/lower flammability or	No information available	
Explosive limit	No information available	
Density	1.0722±0.0010 g/mL at 20 ± 1°C	
Vapor density	No information available	
Vapor pressure	No information available	
Water solubility	No information available	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Voc Content	No information available	
Dynamic Viscosity	291.2Cp (mPa.s)	
Oxidizing properties	No information available	
Explosive properties	No information available	
Surface Tension	57.78 ± 0.35 mN/m	

## 10. Stability and Reactivity

Preparation Date 20-Dec-2016

Revision Date 20-Dec-2016

Revision Number 01

## **Reactivity**

No information available

## **Chemical stability**

Stable under recommended storage conditions.

## **Possibility of hazardous reaction**

None under normal processing.

## **Conditions to avoid**

Avoid heat, flames and spark.

## **Incompatible Materials**

No materials to be specially mentioned.

## **Hazardous decomposition products**

Thermal decomposition can lead to release of irritating or toxic fumes (or gases) in fire.

Thermal hazardous decomposition products: Carbon oxides, Nitrogen oxides (NO<sub>x</sub>) , Sulphur Oxides (SO<sub>x</sub>)

## **11. Toxicological Information**

### **Information on Toxicological Effects**

LD50 Oral = >5000 mg/kg

LD50 Dermal = >2000 mg/kg

LC50 Inhalation = >2.176 mg/l (Maximum breathing zone concentration - No mortality)

### **Local effect**

<b>Inhalation</b>	Based on available data, the classification criteria are not met.
<b>Eye contact</b>	non-irritating
<b>Skin contact</b>	May be harmful in contact with skin
<b>Ingestion</b>	May be harmful if swallowed

### **Chronic toxicity**

<b>Skin Corrosion/Irritation</b>	non-irritant
<b>Eye damage/irritation</b>	non-irritant
<b>Sensitization</b>	Based on available data, the classification criteria are not met.
<b>Mutagenic effects</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenic effects</b>	Based on available data, the classification criteria are not met.
<b>Reproductive effects</b>	Based on available data, the classification criteria are not met.
<b>STOT - Single Exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT - repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure (blood system, liver, kidney, thyroid, brain)
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

## **12. Ecological Information**

### **Ecotoxicity**

**Preparation Date** 20-Dec-2016

**Revision Date** 20-Dec-2016

**Revision Number** 01

Toxic to aquatic life with long lasting effects

LC50/Fish/96hr = >10 mg/l (Oncorhynchus mykiss)

EC50/Daphnia/48hr = 6.8 mg/l

EC50/Algae = 31.33 mg/l (Pseudokirchneriella subcapitata)

### **Persistence and Degradability**

No information available

### **Bioaccumulative Potential**

No information available.

Buprofezin Technical : log Kow = 4.30

### **Other Adverse Effects**

No information available.

## **13. Disposal Considerations**

### **Waste Treatment Methods**

#### **Waste Disposal Method**

Dispose of in accordance with applicable Federal, State, local laws and regulations.

#### **Contaminated packaging**

Empty container should be taken for local recycling, recovery or waste disposal. Do not re-use container. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## **14. Transport Information**

### **IMDG/IMO**

<b>14.1 UN-No</b>	UN 3082
<b>14.2 Proper Shipping name</b>	Environmentally hazardous substances, liquid, n.o.s.( Buprofezin)
<b>14.3 Hazard class</b>	9
<b>14.4 Packing group</b>	III
<b>14.5 EMS-No</b>	F-A,S-F
<b>14.6 Environmental Hazard</b>	Marine pollutant

### **IATA/ICAO**

<b>14.1 UN-No</b>	UN 3082
<b>14.2 Proper Shipping name</b>	Environmentally hazardous substances, liquid, n.o.s.(Buprofezin)
<b>14.3 Hazard class</b>	9
<b>14.4 Packing group</b>	III
<b>14.6 Environmental Hazard</b>	Yes

## **15. Regulatory Information**

### **International Inventories**

(Buprofezin 69327-76-0)

<b>USINV</b>	Complies
<b>TSCA</b>	-
<b>EINECS/ELINCS</b>	-
<b>DSL/NDSL</b>	-
<b>PICCS</b>	-

**Preparation Date** 20-Dec-2016

**Revision Date** 20-Dec-2016

**Revision Number** 01

**ENCS**

**Japan**

**AICS**

**KECL**

-

Complies

Complies

Complies

- : Not listed/Determined

## **Legend**

**USINV** - Total TSCA/FIFRA Inventory

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

## **16. Other Information**

**Preparation Date**

20-Dec-2016

**Revision date**

20-Dec-2016

**Revision Summary**

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**End of Safety Data Sheet**