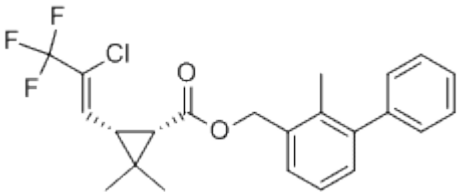
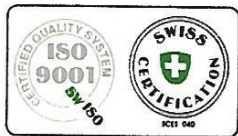


## BIFENTHRIN TECHNICAL

### Description of Technical

Bifenthrin is a pyrethroid insecticide used to control a range of pests. It has a low aqueous solubility and is not volatile. There is a low risk of groundwater contamination based on its chemical properties and it is not persistent in soil.

<b>Common Name</b>	: Bifenthrin
<b>IUPAC Name</b>	: 2-methyl-3-phenylbenzyl (1RS)-cis-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate
<b>C.A. Name</b>	: (2-methyl[1,1'-biphenyl]-3-yl)methyl (1R,3R)-rel-3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethylcyclopropanecarboxylate
<b>Chemical Family</b>	: Pyrethroid
<b>Structural Formula</b>	: 
<b>Empirical formula</b>	: C <sub>23</sub> H <sub>22</sub> ClF <sub>3</sub> O <sub>2</sub>
<b>Molecular Weight</b>	: 422.88
<b>C.A.S. No.</b>	: 82657-04-3
<b>Physical State</b>	: Off-white waxy solid
<b>Melting Point</b>	: 79.6
<b>Odour</b>	: Weak aromatic odor
<b>Density</b>	: 1.26 g/l at 20°C
<b>Vapour Pressure</b>	: 0.0178 mPa at 25°C



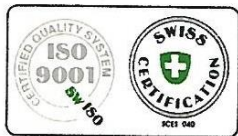
<b>Flash Point</b>	: 151°C
<b>Explosion Hazard</b>	: Not explosive or oxidizing
<b>Solubility in water</b>	: 0.001 mg/l at 20 °C
<b>Stability</b>	: Stable pH 5 to pH 9 at 25°C. Hydrolysis occurs at elevated temperatures e.g. DT <sub>50</sub> 20 mins at pH 4, 90°C.

## **BIFENTHRIN TECHNICAL**

### **Sales Specification**

The material is in the form of an off white waxy solid. The material will comply with the following specifications:

Bifenthrin content by mass	: 95% min
Moisture content	: 0.2% max
Packing	: 25 kg LDPE bags, should be heat sealed and packed in fiber board drum
Transportation information	: UN No.3349 Class 6.1 IMDG code UN3349 Pyrethroid pesticide, solid, toxic 6.1 PG III, Marine pollutant Packing Group III



## TOXICOLOGICAL PROFILE

<b>LD50 Acute oral</b>	<b>:</b>	<b>Rat</b>	<b>54.5 mg/kg</b>
<b>LD50 acute Percutaneous</b>	<b>:</b>	<b>Rabbit</b>	<b>&gt; 2000 mg/kg</b>
<b>LC50 inhalation (4 hr)</b>	<b>:</b>	<b>Rat</b>	<b>1.01 mg/l air</b>
<b>Skin irritation</b>	<b>:</b>	<b>Rabbit</b>	<b>Non-irritant</b>
<b>Eye irritation</b>	<b>:</b>	<b>Rabbit</b>	<b>Non-irritant</b>
<b>Skin sensitization</b>	<b>:</b>	<b>Rabbit</b>	<b>No skin sensitization</b>