1. IDENTIFICATION OF COMPANY & PRODUCT

Product Name: Fipronil 5% SC
Chemical Name: 5-amino-1-(2, 6-dichloro-4(trifluoromethyl) phenyl)-4-((1, R, S)-(trifluoromethyl) sulfinyl)-1- H-pyrazole-3-carbonitrile
Brand Name: RABID
Users: Insecticide
Molecular Formula: C12H4Cl2F6N4OS
Manufacturer: CROP LIFE SCIENCE LTD.
Address: Plot No. 5165, 5166, 5151, G.I.D.C., Ankleshwar-393002, Gujarat, India
Tele Fax Number: 91 2646 238479

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS Number</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fipronil</td>
<td>120068-37-3</td>
<td>5.0</td>
</tr>
<tr>
<td>Inert ingredients</td>
<td></td>
<td>Up to 100.0</td>
</tr>
</tbody>
</table>

3. HEALTH HAZARDS IDENTIFICATION

Potential Health Effects & Symptoms
Eyes: May cause redness and tearing of eyes.
Skin: May cause irritation, redness and tearing of skin.
Ingestion: Harmful if swallowed.
Inhalation: Harmful if inhaled.
Chronic exposure: May cause chronic respiratory problems like asthma, emphysema or bronchitis.

4. FIRST AID MEASURES

FIRST AID
IF SWALLOWED:
• Call a poison control center or doctor immediately for treatment advice.
• Have person sip a glass of water if able to swallow.
• Do not induce vomiting unless told to do so by the poison control center or doctor.
### Material safety data sheet

**Fipronil 5% SC**

| IF ON SKIN OR CLOTHING: | • Do not give anything by mouth to an unconscious person.  
| | • Take off contaminated clothing.  
| | • Rinse skin immediately with plenty of water for 15-20 minutes.  
| | • Call a poison control center or doctor for treatment advice.  
| IF INHALED: | • Move person to fresh air.  
| | • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible.  
| | • Call a poison control center or doctor for further treatment advice.  
| IF IN EYES: | • Hold eye open and rinse slowly and gently with water 15-20 minutes.  
| | • Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye.  
| | • Call a poison control center or doctor for treatment advice.  

**Note to Physician**: There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred. In severe cases of overexposure by oral ingestion lethargy muscle tremors and in extreme cases possibly convulsions may occur.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

### 5. FIRE FIGHTING MEASURES

- **FLASH POINT**: Not applicable
- **FLAMMABLE LIMITS**: Not applicable
- **EXTINGUISHING MEDIA**: Water spray, CO2, foam, dry powder.
- **FIRE & EXPLOSION HAZARDS**: Pesticide fires have potential to emit hazardous gases such as carbon monoxide, carbon dioxide, hydrogen fluoride, hydrogen chloride, nitrogen oxides, sulfur oxides, acid halides. If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released if the product is involved in a fire.
- **FIRE-FIGHTING PROCEDURES**: Isolate fire area and evacuate downwind. DO NOT breathe gases, smoke or vapors generated. Wear self-contained breathing apparatus and full-protective clothing.
- **HAZARDOUS DECOMPOSITION PRODUCTS**: May release irritating and toxic gases due to thermal decomposition.
6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: Take appropriate protective measures. Wear positive pressure self-contained breathing apparatus (SCBA). Clear area. Dike spillage. Do not touch or walk through spilled material. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Take up with sand or other non-combustible absorbent material and place into containers for later disposal. Prevent entry into waterways, sewers, basements or confined areas.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Carefully open containers and after partial use close container tightly. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store unused product in original container only out of reach of children and animals.

STORAGE TEMPERATURE (MIN/MAX): Normal ambient temperatures.

8. EXPOSURE CONTROLS/PERSOAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSOAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

HAND PROTECTION: Chemical-resistant gloves.
SKIN PROTECTION: Long-sleeve shirt, long pants, shoes plus socks.
EYE PROTECTION: Protective eyewear or chemical safety glasses with side shields or chemical goggles when working in non-ventilated spaces.
RESPIRATOR REQUIREMENTS: If handling without sufficient ventilation, wear a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C0 or a NIOSH approved respirator with any N, R, P or HE class filter.
VENTILATION: Whenever possible, adequate ventilation should be used to minimize the need for personal protective equipment.
ADDITIONAL PROTECTIVE MEASURES:

Follow manufacturer’s instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.

USER SAFETY RECOMMENDATIONS:

Users Should:

• Wash hands before eating, drinking, and chewing gum, using tobacco or using the toilet.
• Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
• Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

EXPOSURE GUIDELINES: Refer to Section 3.

ENGINEERING CONTROLS: Minimize airborne concentrations.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Liquid flowable suspension
ODOR: Not available
pH: 5-7 (1% in water)
FLASH POINT: Not applicable
DENSITY: 1.06 g/mL @ 26oC

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.
CONDITIONS TO AVOID: Strong oxidizing agents. Avoid excessive heat.
HAZARDOUS DECOMPOSITION PRODUCTS: May release irritating and toxic gases due to thermal decomposition.
HAZARDOUS POLYMERIZATION: Will not occur.
11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:
- Acute Oral LD50 (Rat): 1,999 mg/kg
- Acute Dermal LD50 (Rabbit): > 2,000 mg/kg
- Acute Inhalation LC50 (Rat): > 1.7 mg/L/4 hr
- Eye Irritation: Slightly irritating
- Skin Irritation: Slightly irritating
- Dermal Sensitization: Not a skin sensitizer

REPRODUCTIVE/DEVELOPMENTAL TOXICITY (data on Fipronil)
- Animals studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals. No indications of a developmental toxicity or Teratogenic effects were seen in animal studies.

CHRONIC/SUBCHRONIC TOXICITY (data on Fipronil)
- Signs of toxicity during a 52-week chronic rat feeding study included reduced feeding and food conversion efficiency, reduced body weight gain, seizures and seizure-related death, changes in thyroid hormones, increased mass of the liver and thyroid, and kidney effects.

CARCINOGENICITY (data on Fipronil)
- The EPA has classified Fipronil a Group C Possible Human Carcinogen based on laboratory animal studies (increased thyroid tumors in male and female rats). Humans and rats have the same of the mechanism of action which produced Fipronil-induced thyroid tumors in the rat; however, the rat appears to be more highly sensitive than humans. Therefore, Fipronil-induced rat thyroid tumors are not considered suggestive of a human health risk. None of the remaining ingredients in the mixture are considered to be carcinogenic.

MUTAGENICITY (data on Fipronil)
- Results from a number of mutagenicity studies with microorganisms, mammalian cell culture and mammals are available. Taking into account all of the information, there is no indication that the substance is mutagenic.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This pesticide is toxic to birds, fish and aquatic invertebrates. Do not apply directly to water or to areas where surface waters present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring disposal of wastes. Do not contaminate water when disposing of equipment wash waters.
ECOTOXICOLOGICAL INFORMATION (data on Fipronil)

Bluegill sunfish \((Lepomis macrochirus)\) LC50 (96 h) – 0.083 mg/L
Rainbow trout \((Onchorhynchus mykiss)\) LC50 (96 h) – 0.246 mg/L
Sheephead minnow LC50 (96 h) – 0.13 mg/L
Water flea \((Daphnia magna)\) NOEL – 9.8 μg/L; LOEL - 20 μg/L
Bobwhite quail LD50 > 11.3 mg/kg

ENVIRONMENTAL FATE, PERSISTENCE AND DEGRADABILITY, MOBILITY
: Not readily biodegradable (by OECD criteria).

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. Dispose of excess or waste pesticide by use according to label directions, or contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

14. TRANSPORT INFORMATION

Ground Domestic (DOT): Not regulated.
Vessel (IMDG): UN3082, Environmentally Hazardous substances, liquid, n.o.s. (Fipronil), 9, PG III, Marine Pollutant
Air (IATA): UN3082, Environmentally Hazardous substances, liquid, n.o.s. (Fipronil), 9, PG III

15. REGULATORY INFORMATION

FIFRA INFORMATION: This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information for safety data sheet, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.
CAUTION: Harmful if swallowed, absorbed through skin, or inhaled. Do not get in eyes or on skin or on clothing. Do not breathe spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.

SARA TITLE III CLASSIFICATION:
Section 302: Not applicable.
Section 311/312: Acute health hazard (immediate)
Chronic health hazard (delayed)
Section 313: Not applicable

CA PROPOSITION 65: Not applicable

CERCLA RQ: Not applicable

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we have been advised of the possibility of such damages.