PRODUCT SAFETY DATA SHEET OF FIPRONIL 0.05% GEL

1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Trade Name:</th>
<th>N-FORCE GEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Name</td>
<td>Fipronil 0.05% GEL</td>
</tr>
<tr>
<td>Chemical name</td>
<td>Fipronil Gel</td>
</tr>
<tr>
<td>Formula</td>
<td>C\textsubscript{12}H\textsubscript{4}C\textsubscript{l2}F\textsubscript{6}N\textsubscript{4}OS</td>
</tr>
<tr>
<td>Supplier</td>
<td>CHEMET WETS &amp; FLOWS P. LTD.</td>
</tr>
<tr>
<td></td>
<td>129/C-2, GIDC Ind.Estate,</td>
</tr>
<tr>
<td></td>
<td>ANKLESHWAR-02</td>
</tr>
<tr>
<td></td>
<td>GUJARAT, INDIA</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>CHEMET WETS &amp; FLOWS P. LTD.</td>
</tr>
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<td></td>
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<td></td>
<td>ANKLESHWAR-02</td>
</tr>
<tr>
<td></td>
<td>GUJARAT, INDIA</td>
</tr>
<tr>
<td>Emergency Phone No.</td>
<td>02646-239490</td>
</tr>
<tr>
<td>Fax No:</td>
<td>02646-220254</td>
</tr>
<tr>
<td>Environmental, Health and Safety Department</td>
<td>02646-239490</td>
</tr>
<tr>
<td></td>
<td>02646-220254</td>
</tr>
<tr>
<td>Email Id</td>
<td><a href="mailto:chemetank@gmail.com">chemetank@gmail.com</a></td>
</tr>
</tbody>
</table>

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>C.A.S.- No.</th>
<th>Average % By Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIPRONIL GEL</td>
<td>120068-37-3</td>
<td>0.05%</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Emergency Overview:

Caution! Keep exposed gel away from open food and food contact surfaces. Harmful if absorbed through skin. Moderate eye irritation. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling.

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Gel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Brown</td>
</tr>
<tr>
<td>Routes of Exposure</td>
<td>Eye Contact, Skin Absorption, Skin Contact, Ingestion</td>
</tr>
</tbody>
</table>
Immediate effects eye

Avoid contact with eyes. Moderately irritating to the eyes following prolonged direct contact.

Skin

Avoid contact with skin, eyes and clothing. Harmful if absorbed through skin. Moderately irritating to skin following prolonged direct contact.

Ingestion

Do not take Internally.

Medical Condition Aggravated by Exposure

No specific medical conditions are known which may be aggravated by exposure to this product.

4. FIRST AID MEASURES

General

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

Eye

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.

Skin

Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.

Ingestion

Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Inhalation

Move to fresh air. If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.

NOTE to physician Treatment

There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.
5. FIRE FIGHTING MEASURES

| Flash point: | N/A |

**Fire and Explosion Hazard**

In the event of fire the following can be released:
- Sulphur oxides
- Nitrogen oxides (NOx)
- Hydrogen fluoride

**Suitable Extinguishing Media**

Dry chemical, Foam, Water, Carbon dioxide (CO₂)

**Fire Fighting Instruction**

Keep out of smoke. Fight fire from upwind position. Do not allow run-off from fire fighting to enter drains or water courses.

In the event of fire and/or explosion do not breathe fumes. Firefighters should wear approved self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

**Additional Advice**

Use personal protective equipment. If spilled on the ground, the affected area should be scraped clean and placed in an appropriate container for disposal.

**Methods for cleaning up**

Clean contaminated floors and objects thoroughly, observing environmental regulations. Decontaminate tools and equipment following cleanup.

7. HANDLING AND STORAGE

**Handling precautions**

Product will stain porous surfaces.

**Storage requirements**
Keep tightly closed in a dry, cool and well-ventilated place. Keep out of reach of children and animals. Protect against heat/overheating. Keep away from direct sunlight.

**Work/Hygienic Procedures**

Keep away from food, drink and animal feeding stuffs. Wash hands thoroughly with soap and water after handling and before eating, drinking, and chewing gum, using tobacco, using the toilet or applying cosmetics.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**General Protection**

Follow all label instructions. Train employees in safe use of the product. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

<table>
<thead>
<tr>
<th>Engineering Controls</th>
<th>Ensure adequate ventilation.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye and Face protection</strong></td>
<td>Protective eyewear.</td>
</tr>
<tr>
<td><strong>Hand protection</strong></td>
<td>Chemical resistant nitride rubber gloves.</td>
</tr>
</tbody>
</table>

**Body protection**

Skin contact should be prevented. Use suitable protective clothing, gloves and footwear, selected with regard to use conditions and exposure potential.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE**

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Gel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Brown</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>9.51 lbs/gal</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Chemical Stability:**

Stable under normal Condition.

**Conditions to avoid.**

Extremes of temperature and direct sunlight. Exposure to moisture.

**Incompatibility**
Strong oxidizing agents
Strong bases
Strong acids

11. TOXICOLOGICAL INFORMATION.

Acute toxicity data have been bridged from a similar formulation containing a slightly higher percentage of the active ingredient, fipronil. The non-acute information pertains to technical-grade active ingredient.

Acute Oral Toxicity
Rat: LD50: > 5,000 mg/kg

Acute Dermal Toxicity
Rat: LD50: > 2,000 mg/kg

Acute Inhalation Toxicity
Rat: LD50: > 2.9 mg/l
Exposure time 1 hr.
Rat LD50: > 11.6 mg/l
Exposure time 1 hr.
Extrapolated from the 4 hr LC50

Skin Irritation
Rabbit: Slight Irritation

Eye Irritation
Rabbit: No eye irritation.

Sensitization
Guinea pig: Non-sensitizing.

Chronic Toxicity
Fipronil caused liver, kidney or thyroid effects and/or neurobehavioral effects (e.g., tremors) in chronic toxicity studies in rats and dogs. Fipronil did not induce any microscopic lesions in the neural tissues.

Reproductive & Developmental Toxicity
REPRODUCTION: Fipronil was not considered a primary reproductive toxicant in rats.

DEVELOPMENTAL TOXICITY: Fipronil was not a developmental toxicant in rats and rabbits.

Neurotoxicity
Fipronil caused transient neurobehavioral effects (e.g., tremors) in neurotoxicity studies in rats. Delays in developmental landmarks were observed in rats at maternally toxic doses.

Mutagenecity
Fipronil was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
12. ECOLOGICAL INFORMATION.

Environmental Precautions
Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.

13. DISPOSAL CONSIDERATION

General Disposal Guidance
It is best to use the entire product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines. Never place unused product down any indoor or outdoor drain.

Container Disposal
Do not re-use empty containers. Place empty container in trash. Follow advice on product label and/or leaflet.

14. TRANSPORT INFORMATION
NONE

15. REGULATORY INFORMATION
NONE

16. OTHER INFORMATION
NONE

DISCLAIMER
All reasonable care has been exercised in processing your request for information on the chemical listed in this Material Safety Data Sheet. No warranty is made, either expressed or implied and Perisseuma Projects does not hold itself liable for any injury, illness, loss or misinterpretation arising from the use of this data. CHEMET WETS & FLOWS P.LTD makes no warranty expressed or implied in respect of the adequacy of this document for any particular purpose.

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