SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: PREMISE® 2 INSECTICIDE  
MSDS Number: 102000006536  
EPA Registration No.: 432-1331  
Product Use: Broad spectrum systemic insecticide for use in a variety of indoor and outdoor applications.

Bayer Environmental Science  
2 T.W. Alexander Drive  
Research Triangle PK, NC 27709  
USA

For MEDICAL, TRANSPORTATION or other EMERGENCY call 1-800-334-7577 (24 hours/day)  
For Product Information call 1-800-331-2867

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component Name</th>
<th>CAS-No.</th>
<th>Average % by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imidacloprid</td>
<td>138261-41-3</td>
<td>21.40</td>
</tr>
</tbody>
</table>

SECTION 3. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview: Caution! Hazard to humans and domestic animals. Harmful if swallowed or absorbed through skin. Keep out of reach of children and animals.

Physical State: viscous liquid suspension

Odor: mild

Appearance: off-white

Routes of Exposure: Inhalation, Skin contact, Skin Absorption

Immediate Effects:
- **Eye**: May cause eye irritation. Eye injury may persist for several days.
- **Skin**: Harmful if absorbed through skin. No skin irritation Non-sensitizing
- **Ingestion**: Harmful if swallowed.
- **Inhalation**: Harmful if inhaled.
Chronic or Delayed Long-Term

This product is not listed by NTP, IARC or regulated as a carcinogen by OSHA.

Medical Conditions Aggravated by Exposure

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

SECTION 4. FIRST AID MEASURES

General

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

Skin

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

Ingestion

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 directed to do so by a physician or poison control center. Do not give anything by mouth to an unconscious or convulsing person.

Inhalation

Remove to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or Poison Control Centre immediately.

Notes to Physician Treatment

There is no specific antidote. Treat symptomatically.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point

> 93 °C / > 199 °F

Lower Flammability Limit

not applicable

Upper Flammability Limit

not applicable

Fire and Explosion Hazards

May give off poisonous fumes including hydrogenchloride and oxides of nitrogen.

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Fire Fighting Instructions

Keep out of smoke. Cool containers / tanks with water spray. Fight fire from upwind position. Do not allow run-off from fire fighting to enter drains or water courses. Equipment or materials involved in pesticide fires may become contaminated.

Wear self-contained breathing apparatus and protective suit.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Methods for Cleaning Up
Dike area to prevent runoff. Recover material, if possible. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up and place in appropriate closed container (see Section 7: Handling and Storage). Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Collect and contain contaminated absorbent and dike material for disposal. Do not allow spilt product to enter soil or waterways.

Additional Advice
Isolate area and keep unauthorized people away. Avoid breathing vapors and avoid skin contact. Use proper protective equipment to minimize personal exposure (see Section 8). Contaminated soil may have to be removed and disposed. Contact Bayer for further assistance if necessary.

SECTION 7. HANDLING AND STORAGE

Handling Procedures
Read label carefully before use. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Storing Procedures
Store in an area that is clean, dry and cool. Store in an area away from food, feedstuffs, fertilizers and seed. Store in an area designated specifically for pesticides.

Work/Hygienic Procedures
Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product.

Min/Max Storage Temperatures
No minimum / 30 day average not to exceed 100 F.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls
Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Eye/Face Protection
splash goggles

Hand Protection
Chemical resistant gloves made of waterproof material such as polyethylene or
polyvinyl chloride.

**Body Protection**
Wear long-sleeved shirt and long pants and shoes plus socks.

**Respiratory Protection**
No personal respiratory protective equipment normally required. When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or Industry recommendations.

**General Protection**
Follow all label instructions. Eye wash facility and safety shower should be available. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Exposure Limits</th>
<th>Glycerine</th>
<th>ACGIH</th>
<th>TWA</th>
<th>10 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form of Exposure</td>
<td>Mist.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSHA Z1 PEL</td>
<td>5 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form of Exposure</td>
<td>Respirable fraction.</td>
<td>15 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSHA Z1 PEL</td>
<td>Total dust.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form of Exposure</td>
<td>5 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSHA Z1A TWA</td>
<td>Respirable fraction.</td>
<td>10 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form of Exposure</td>
<td>Total dust.</td>
<td></td>
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<td>Form of Exposure</td>
<td>Respirable fraction.</td>
<td>10 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US CA OEL PEL</td>
<td>Total dust.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form of Exposure</td>
<td>5 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US CA OEL PEL</td>
<td></td>
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<td>Form of Exposure</td>
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<td></td>
</tr>
</tbody>
</table>

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>off-white</td>
</tr>
<tr>
<td><strong>Physical State</strong></td>
<td>viscous liquid suspension</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>mild</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>7.5</td>
</tr>
<tr>
<td><strong>Specific Gravity</strong></td>
<td>1.12 at 20 °C</td>
</tr>
<tr>
<td><strong>Melting/Freezing Point</strong></td>
<td>-6.7 °C / 19.9 °F</td>
</tr>
<tr>
<td><strong>Water Solubility</strong></td>
<td>dispersible</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>350 - 500 mPa.s at 25 °C</td>
</tr>
</tbody>
</table>

**SECTION 10. STABILITY AND REACTIVITY**
SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been conducted on this product as formulated. The non-acute information pertains to the active ingredient, imidacloprid.

**Acute Oral Toxicity**
- male rat: LD50: > 4,870 mg/kg
- female rat: LD50: 4,143 mg/kg

**Acute Dermal Toxicity**
- male/female rabbit: LD50: > 2,000 mg/kg

**Acute Inhalation Toxicity**
- male/female rat: LC50: > 5.33 mg/l
  - Exposure time: 4 h (actual)
  - Determined in the form of liquid aerosol.
- male/female rat: LC50: > 20 mg/l
  - Exposure time: 1 h (actual)
  - Determined in the form of liquid aerosol.
  - Extrapolated from the 4 hr LC50.

**Skin Irritation**
- rabbit: No skin irritation

**Eye Irritation**
- rabbit: Mild irritation to the cornea and conjunctiva was observed with all irritation clearing within 7 days post-treatment.
  - Minimally irritating.

**Sensitization**
- guinea pig: Non-sensitizing

**Subchronic Toxicity**
- In a 3-week dermal toxicity study, rabbits treated with imidacloprid showed no local or systemic effects at levels up to and including 1000 mg/kg, the limit dose.
- In a 4-week inhalation study, rats exposed to high concentrations of imidacloprid exhibited decreased body weight gains and changes in clinical chemistries and organ weights.
Chronic Toxicity

In chronic dietary studies in rats and dogs exposed to imidacloprid, the target organs were the thyroids and/or liver.

Assessment Carcinogenicity

In oncogenicity studies in rats and mice, imidacloprid was not considered carcinogenic in either species.

ACGIH
None.

NTP
None.

IARC
None.

OSHA
None.

Reproductive & Developmental Toxicity

REPRODUCTIVE TOXICITY: In a two-generation reproduction study in rats, imidacloprid was not a primary reproductive toxicant. Offspring exhibited reduced body weights at the high dose and in conjunction with maternal toxicity.

DEVELOPMENTAL TOXICITY: In developmental toxicity studies in rats and rabbits, there was no evidence of an embryotoxic or teratogenic potential for imidacloprid. In both species, developmental effects were observed only at high doses and in conjunction with maternal toxicity.

Neurotoxicity

In acute and subchronic neurotoxicity screening studies in rats, imidacloprid produced slight neurobehavioral effects in each study at the highest dose tested. There were no correlating morphological changes observed in the neural tissues.

In a one-generation developmental neurotoxicity screening study in rats, offspring exposed to imidacloprid showed decreased motor activities. These effects occurred at the highest dose tested and in conjunction with maternal toxicity. There were no correlating morphological changes observed in the neural tissues.

Mutagenicity

The imidacloprid mutagenicity studies, taken collectively, demonstrate that the active ingredient is not genotoxic or mutagenic.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions

Extremely toxic to aquatic and estuarine invertebrates. 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. Notify state and/or Federal authorities and Bayer immediately if you observe any adverse environmental effects due to the use of this product.
This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

SECTION 13. DISPOSAL CONSIDERATIONS

**General Disposal Guidance**
Follow container label instructions for disposal of wastes generated during use in compliance with the product label. In other situations, bury in an approved landfill or burn in an incinerator approved for pesticide destruction. Do not re-use empty containers. Packaging that cannot be cleaned should be disposed of as product waste.

SECTION 14. TRANSPORT INFORMATION

**DOT CLASSIFICATION:**
Not regulated for Domestic Surface Transportation

**FREIGHT CLASSIFICATION:**
Insecticides or Fungicides, N.O.I., other than poison

SECTION 15. REGULATORY INFORMATION

**EPA Registration No.**
432-1331

**US Federal Regulations**

**TSCA list**
None.

**US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)**
None.

**SARA Title III - Section 302 - Notification and Information**
None.

**SARA Title III - Section 313 - Toxic Chemical Release Reporting**
None.

**US States Regulatory Reporting**

**CA Prop65**
This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

**US State Right-To-Know Ingredients**
None.

**Canadian Regulations**

**Canadian Domestic Substance List**
None.
Environmental

CERCLA
None.

Clean Water Section 307 Priority Pollutants
None.

Safe Drinking Water Act Maximum Contaminant Levels
None.

SECTION 16. OTHER INFORMATION

NFPA
Health - 1  Flammability - 1  Reactivity - 1  Others - none
0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason to Revise: Update format; change MSDS Number.

Revision Date: 04/05/2005

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