# SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>LUNA® EXPERIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MSDS Number</strong></td>
<td>102000021448</td>
</tr>
<tr>
<td><strong>Product code (UVP)</strong></td>
<td>79465815</td>
</tr>
<tr>
<td><strong>EPA Registration No.</strong></td>
<td>264-1091</td>
</tr>
<tr>
<td><strong>Product Use</strong></td>
<td>Fungicide</td>
</tr>
</tbody>
</table>

Bayer CropScience  
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: 1-866-99BAYER (1-866-992-2937)

# SECTION 2. HAZARDS IDENTIFICATION

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

**Emergency Overview**  
Caution! Harmful if swallowed, inhaled or absorbed through the skin. Avoid contact with skin, eyes and clothing. Avoid breathing spray mist. Remove and wash contaminated clothing before re-use.

**Physical State**  
suspension

**Odor**  
characteristic

**Appearance**  
white to beige

**Exposure routes**  
Ingestion, Inhalation, Skin contact

**Immediate Effects**

- **Eye**: May cause eye irritation. Do not get in eyes.
- **Skin**: Harmful if absorbed through skin. Avoid contact with skin and clothing.
- **Ingestion**: Harmful if swallowed. Do not take internally.
- **Inhalation**: May be harmful if inhaled. Avoid breathing spray mist.

**Potential Environmental Effect**  
Toxic to fish and aquatic invertebrates. Toxic to mammals. This product may impact surface water quality due to runoff.
SECTION 3. 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>Fluopyram</td>
<td>658066-35-4</td>
<td>17.60</td>
</tr>
<tr>
<td>Tebuconazole</td>
<td>107534-96-3</td>
<td>17.60</td>
</tr>
<tr>
<td>Polyethylene-polypropylene copolymer</td>
<td>9003-11-6</td>
<td>2.20</td>
</tr>
<tr>
<td>1,2-Propanediol</td>
<td>57-55-6</td>
<td>2.20</td>
</tr>
</tbody>
</table>

SECTION 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 Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.

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

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

Inhalation Move 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 center immediately.

Notes to physician Treatment There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

SECTION 5. FIRE FIGHTING MEASURES

Flash point > 65 °C / > 149 °F

Autoignition temperature 430 °C / 806 °F

Lower Flammability Limit no data available

Upper Flammability Limit no data available
Explosiveness
Not explosive
92/69/EEC, A.14 / OECD 113

Fire and Explosion Hazards
In the event of fire the following may be released:
Hydrogen cyanide (hydrocyanic acid)
Carbon monoxide (CO)
Nitrogen oxides (NOx)

Suitable extinguishing media
Water spray, Carbon dioxide (CO2), Foam, Sand

Fire Fighting Instructions
Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

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

Methods for cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice
Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

SECTION 7. HANDLING AND STORAGE

Handling procedures
Use only in area provided with appropriate exhaust ventilation.

Keep away from heat and sources of ignition.

Storing Procedures
Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Protect from freezing.

Work/Hygienic Procedures
Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove
soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Protection
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.

Eye/Face Protection
Safety glasses with side-shields

Hand Protection
Chemical resistant nitrile rubber gloves

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

Respiratory protection
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.

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>Exposure Standard</th>
<th>TWA / ST / AN</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tebuconazole</td>
<td>107534-96-3</td>
<td>OES BCS*</td>
<td>TWA</td>
<td>0.2 mg/m³</td>
</tr>
<tr>
<td>1,2-Propanediol</td>
<td>57-55-6</td>
<td>WEEL</td>
<td>TWA</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TX ESL</td>
<td>ST ESL</td>
<td>20 ug/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TX ESL</td>
<td>ST ESL</td>
<td>500 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TX ESL</td>
<td>AN ESL</td>
<td>2 ug/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TX ESL</td>
<td>AN ESL</td>
<td>50 ppm</td>
</tr>
</tbody>
</table>

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
white to beige

Physical State
suspension

Odor
characteristic

pH
5.0 - 9.0 (100 %) at 23 °C

Vapor Pressure
no data available

Vapor Density (Air = 1)
no data available

Density
ca. 1.13 g/cm³ at 20 °C
Evaporation rate: no data available
Boiling Point: no data available
Melting / Freezing Point: no data available
Water solubility: no data available
Solubility in other solvents: no data available
Minimum Ignition Energy: no data available
Partition coefficient: n-octanol/water: no data available
Viscosity: 250 - 400 mPa.s at 20 °C, Velocity gradient 20 /s

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid: freezing
Incompatibility: no data available
Hazardous Decomposition Products: no data available
Hazardous reactions: No hazardous reactions when stored and handled according to prescribed instructions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity studies have been bridged from a similar formulation containing a similar percentage of the active ingredients. The non-acute information pertains to the technical-grade active ingredients.

Acute oral toxicity: rat: LD50: > 2,000 mg/kg
Test conducted with a similar formulation.

Acute dermal toxicity: rat: LD50: > 2,000 mg/kg
Test conducted with a similar formulation.
Acute inhalation toxicity  
rat: LC50: > 1.9 mg/l  
Exposure time: 4 h  
Test conducted with a similar formulation.  
Determined in the form of liquid aerosol.  
Highest attainable concentration.  
No deaths

Skin irritation  
rabbit: No skin irritation  
Test conducted with a similar formulation.

Eye irritation  
rabbit: Mild eye irritation.

Sensitisation  
mouse: Non-sensitizing.  
Test conducted with a similar formulation.  
OECD Test Guideline 429, local lymph node assay (LLNA)

Chronic toxicity  
Fluopyram caused specific target organ toxicity in the liver in experimental animal studies. The effect is due to an overwhelmed metabolic capacity of the liver at high dose levels.

Tebuconazole did not cause specific target organ toxicity in experimental animal studies.

Assessment Carcinogenicity  
Fluopyram caused an increased incidence of tumours in the liver of rats at high dose levels.

Fluopyram caused an increased incidence of tumours in the thyroid of mice. The tumours seen with Fluopyram were caused through a non-genotoxic mechanism, which is not relevant at low doses. The mechanism that triggers tumours in rodents and the type of tumours observed are not relevant to humans.

Tebuconazole caused an increased incidence of tumours in the liver of mice at high dose levels. The mechanism of tumour formation in the liver of the mice is not considered to be relevant to man.

ACGIH  
None.

NTP  
None.

IARC  
None.

OSHA  
None.

Reproductive toxicity  
Fluopyram caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Fluopyram is related to general toxicity.

Tebuconazole caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Tebuconazole is related to general toxicity.
Developmental Toxicity

Fluopyram caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Fluopyram are related to maternal toxicity.

Tebuconazole caused developmental toxicity only at dose levels toxic to the dams. Tebuconazole caused an increased incidence of post implantation losses, an increased incidence of non-specific malformations.

Mutagenicity

Fluopyram was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Tebuconazole was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity to fish

Rainbow trout (Oncorhynchus mykiss)
static test
LC50: 21.7 mg/l
Exposure time: 96 h
Test conducted with a similar formulation.

Toxicity to aquatic plants

Pseudokirchneriella subcapitata
Growth rate
EC50: 17.7 mg/l
Exposure time: 72 h
Test conducted with a similar formulation.

Acute Toxicity to Aquatic Invertebrates

Water flea (Daphnia magna)
EC50: 56.9 mg/l
Exposure time: 48 h
Test conducted with a similar formulation.

Environmental precautions

Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

Dispose in accordance with all local, state/provincial and federal regulations. Do not contaminate water, food, or feed by disposal. Follow advice on product label and/or leaflet.

Container Disposal

Do not re-use empty containers. Triple rinse containers. Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities. Follow advice on product label and/or leaflet.
RCRA Information
Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14. TRANSPORT INFORMATION

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 264-1091

US Federal Regulations
TSCA list
Polyethylene-polypropylene copolymer  9003-11-6
1,2-Propanediol  57-55-6

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
1,2-Propanediol  57-55-6  MN, RI

Canadian Regulations
Canadian Domestic Substance List
Polyethylene-polypropylene copolymer  9003-11-6
1,2-Propanediol  57-55-6

Environmental
CERCLA
None.

Clean Water Section 307 Priority Pollutants
None.

Safe Drinking Water Act Maximum Contaminant Levels
None.
SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):
   Health - 2   Flammability - 1   Instability - 0   Others - none

   Health - 2   Flammability - 1   Physical Hazard - 0   PPE - 
   0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: Reviewed and updated for general editorial purposes.

Revision Date: 02/01/2012

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