SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name: GAUCHO® XT FLOWABLE
Product code (UVP): 06539106
SDS Number: 102000012863
EPA Registration No.: 264-971

Relevant identified uses of the substance or mixture and uses advised against

Use: Insecticide, Fungicide, Seed treatment
Restrictions on use: See product label for restrictions.

Information on supplier

Supplier: Bayer CropScience
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

Responsible Department: Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days): 1-800-334-7577
Product Information Telephone Number: 1-866-99BAYER (1-866-992-2937)

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Reproductive toxicity: Category 2
Acute toxicity (Inhalation): Category 4

Signal word: Warning

Hazard statements
Suspected of damaging fertility or the unborn child.
Harmful if inhaled.

Precautionary statements
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing mist and spray. Use only outdoors or in a well-ventilated area. IF exposed or concerned: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell. Store locked up. Dispose of contents/container in accordance with local regulation.

Other hazards
No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component Name</th>
<th>CAS-No.</th>
<th>Concentration % by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imidacloprid</td>
<td>138261-41-3</td>
<td>12.7</td>
</tr>
<tr>
<td>Metalaxyl</td>
<td>57837-19-1</td>
<td>0.82</td>
</tr>
<tr>
<td>Tebuconazole</td>
<td>107534-96-3</td>
<td>0.62</td>
</tr>
<tr>
<td>Glycerine</td>
<td>56-81-5</td>
<td>20.25</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

Description of first aid measures

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

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.

Skin contact
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.

Eye contact
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.

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.

Most important symptoms and effects, both acute and delayed

Symptoms
To date no symptoms are known.

Indication of any immediate medical attention and special treatment needed
Risks
Contains hydrocarbon solvents. May pose an aspiration pneumonia hazard.

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

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media
Suitable Foam, Carbon dioxide (CO2), Dry chemical, Water spray
Unsuitable None known.

Special hazards arising from the substance or mixture
Dangerous gases are evolved in the event of a fire.

Advice for firefighters
Special protective equipment for fire-fighters Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information
Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Flash point > 100 °C
Autoignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Explosivity not applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up
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

Precautions for safe handling

Advice on safe handling
Handle and open container in a manner as to prevent spillage. Ensure adequate ventilation.

Advice on protection against fire and explosion
Keep away from heat and sources of ignition.

Hygiene measures
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.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers
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.
Keep away from direct sunlight. Protect from freezing.

SECTION 8: EXPOSURE CONTROLS/PERSOAL PROTECTION

Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imidacloprid</td>
<td>138261-41-3</td>
<td>50ug/m3 (ST ESL)</td>
<td>07 2011</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Imidacloprid</td>
<td>138261-41-3</td>
<td>5ug/m3 (AN ESL)</td>
<td>07 2011</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Imidacloprid</td>
<td>138261-41-3</td>
<td>0.7 mg/m3 (TWA)</td>
<td></td>
<td>OES BCS*</td>
</tr>
<tr>
<td>Metalaxyl</td>
<td>57837-19-1</td>
<td>50ug/m3 (ST ESL)</td>
<td>07 2011</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Metalaxyl</td>
<td>57837-19-1</td>
<td>5ug/m3 (AN ESL)</td>
<td>07 2011</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Tebuconazole</td>
<td>107534-96-3</td>
<td>5ug/m3 (AN ESL)</td>
<td>07 2011</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Tebuconazole</td>
<td>107534-96-3</td>
<td>50ug/m3 (ST ESL)</td>
<td>07 2011</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Tebuconazole</td>
<td>107534-96-3</td>
<td>0.2 mg/m3 (TWA)</td>
<td></td>
<td>OES BCS*</td>
</tr>
<tr>
<td>Glycerine (Respirable fraction.)</td>
<td>56-81-5</td>
<td>5 mg/m3 (PEL)</td>
<td>02 2006</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>Glycerine (Total dust.)</td>
<td>56-81-5</td>
<td>15 mg/m3 (PEL)</td>
<td>02 2006</td>
<td>OSHA Z1</td>
</tr>
</tbody>
</table>
**Exposure controls**

**Personal protective equipment**

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

**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.

**Hand protection**

Chemical resistant nitrile rubber gloves

**Eye protection**

Tightly fitting safety goggles

**Skin and body protection**

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

**General protective measures**

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.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

| Appearance | red |
| Physical State | Liquid |
| Odor | slight |
| Odour Threshold | no data available |
| pH | 7.0 - 8.5 at 100 % (23 °C) |
Vapor Pressure: no data available
Vapor Density (Air = 1): no data available
Density: 1.12 g/cm³ at 20 °C
Evaporation rate: no data available
Boiling Point: > 100 °C / > 212 °F
Melting / Freezing Point: -17.8 - -15 °C / 0.04 - -5 °F
Water solubility: miscible
Minimum Ignition Energy: not applicable
Decomposition temperature: not applicable
Partition coefficient: n-octanol/water: not applicable
Viscosity: 120 - 450 mPa.s at 25 °C
Flash point: > 100 °C
Autoignition temperature: no data available
Lower explosion limit: no data available
Upper explosion limit: no data available
Explosivity: not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity
Thermal decomposition: not applicable
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.
Conditions to avoid: freezing
Incompatible materials: no data available
Hazardous decomposition products: No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Ingestion, Skin Absorption, Eye contact
Immediate Effects:
May cause eye irritation.

Harmful if absorbed through skin. May cause slight irritation.

Harmful if swallowed.

Harmful if inhaled.

**Information on toxicological effects**

**Acute oral toxicity**  
LD50 (rat) 2,990 mg/kg

**Acute inhalation toxicity**  
LC50 (rat) > 2.04 mg/l  
Exposure time: 4 h  
Determined in the form of liquid aerosol.  
Highest concentration tested  
No deaths

**Acute dermal toxicity**  
LD50 (rat) > 2,000 mg/kg

**Skin irritation**  
Slight irritation (rabbit)

**Eye irritation**  
Minimally irritating. (rabbit)

**Sensitisation**  
Non-sensitizing. (guinea pig)

**Assessment repeated dose toxicity**

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

**Assessment mutagenicity**

Imidacloprid was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.  
Metalaxyl 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.

**Assessment carcinogenicity**

Imidacloprid was not carcinogenic in lifetime feeding studies in rats and mice.  
Metalaxyl was not carcinogenic in lifetime feeding studies in rats and mice.  
Tebuconazole caused at high dose levels an increased incidence of tumours in mice in the following organ(s): liver. The mechanism of tumour formation is not considered to be relevant to man.

**ACGIH**

None.

**NTP**

None.

**IARC**

None.

**OSHA**

None.

**Assessment toxicity to reproduction**
Imidacloprid 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 Imidacloprid is related to parental toxicity. Metalaxyl did not cause reproductive toxicity in a multi-generation study in rats. 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 parental toxicity. 

**Assessment developmental toxicity**

Imidacloprid caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Imidacloprid are related to maternal toxicity. Metalaxyl did not cause developmental toxicity in rats and rabbits. 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.

**Further information**

Only acute toxicity studies have been performed on the formulated product. The non-acute information pertains to the active ingredient(s).

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**SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity to fish**

- LC50 (Oncorhynchus mykiss (rainbow trout)) 211 mg/l
- Exposure time: 96 h
- The value mentioned relates to the active ingredient imidacloprid.

**Toxicity to aquatic invertebrates**

- EC50 (Daphnia magna (Water flea)) 85 mg/l
- Exposure time: 48 h
- The value mentioned relates to the active ingredient imidacloprid.

- LC50 (Chironomus riparius (non-biting midge)) 0.0552 mg/l
- Exposure time: 24 h
- The value mentioned relates to the active ingredient imidacloprid.

**Toxicity to aquatic plants**

- EC50 (Desmodesmus subspicatus (green algae)) > 10 mg/l
- Growth rate; Exposure time: 72 h
- The value mentioned relates to the active ingredient imidacloprid.

**Biodegradability**

- Imidacloprid: not rapidly biodegradable
- Metalaxyl: not rapidly biodegradable
- Tebuconazole: not rapidly biodegradable

**Koc**

- Imidacloprid: Koc: 225
- Metalaxyl: Koc: 163
- Tebuconazole: Koc: 769

**Bioaccumulation**

- Imidacloprid: Does not bioaccumulate.
Metalaxyl: Bioconcentration factor (BCF) < 7
Does not bioaccumulate.
Tebuconazole: Bioconcentration factor (BCF) 35 - 59
Does not bioaccumulate.

Mobility in soil
Imidacloprid: Moderately mobile in soils
Metalaxyl: Moderately mobile in soils
Tebuconazole: Slightly mobile in soils

Additional ecological information
Exposed treated seed may be hazardous to birds.

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.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods
Product
Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.
Dispose in accordance with all local, state/provincial and federal regulations.

Contaminated packaging
Do not re-use empty containers.
Triple rinse containers.
Puncture container to avoid re-use.
Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning.
If burned, stay out of smoke.
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

49CFR
Not dangerous goods / not hazardous material

IMDG
UN number 3082
Class 9
Packaging group III
Marine pollutant YES
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (IMIDACLOPRID SOLUTION)

IATA
UN number: 3082
Class: 9
Packaging group: III
Environn. Hazardous Mark: YES
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (IMIDACLOPRID SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN POISON

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 264-971
US Federal Regulations
TSCA list
Glycerine 56-81-5
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
Glycerine 56-81-5 MN

Canadian Regulations
Canadian Domestic Substance List None.

Environmental
CERCLA None.
Clean Water Section 307 Priority Pollutants
None.

Safe Drinking Water Act Maximum Contaminant Levels
Tebuconazole 107534-96-3

EPA/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 required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

Hazard statements:
- Harmful if swallowed, inhaled or absorbed through the skin.
- Avoid contact with skin, eyes and clothing.
- Avoid inhalation of vapour or mist.
- Wash thoroughly with soap and water after handling.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms
49CFR Code of Federal Regulations, Title 49
ACGIH US. ACGIH Threshold Limit Values
ATE Acute toxicity estimate
CAS-Nr. Chemical Abstracts Service number
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
EINECS European inventory of existing commercial substances
ELINCS European list of notified chemical substances
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IMDG International Maritime Dangerous Goods
N.O.S. Not otherwise specified
NTP US. National Toxicology Program (NTP) Report on Carcinogens
OECD Organization for Economic Co-operation and Development
TDG Transportation of Dangerous Goods
TWA Time weighted average
UN United Nations
WHO World health organisation

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: Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

Revision Date: 09/14/2015

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.