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

Product identifier
Trade name MAXFORCE® IMPACT™ ROACH GEL BAIT
Product code (UVP) 80915004
SDS Number 102000027617
EPA Registration No. 432-1531
Relevant identified uses of the substance or mixture and uses advised against
Use Insecticide
Restrictions on use See product label for restrictions.
Information on manufacturer
Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States
Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577
Product Information Telephone Number
SDS Information or Request SDSINFO.BCS-NA@bayer.com

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200
This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.
Other hazards
No particular hazards known.

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>Clothianidin</td>
<td>210880-92-5</td>
<td>1.00</td>
</tr>
<tr>
<td>Glycerine</td>
<td>56-81-5</td>
<td>10.17</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. If symptoms persist, call a physician.

Skin contact
Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Eye contact
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. Get medical attention if irritation develops and persists.

Ingestion
Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and effects, both acute and delayed

Symptoms
No symptoms known or expected.

Indication of any immediate medical attention and special treatment needed

Risks
This product contains a nicotinoid.

Treatment
There is no specific antidote. Treat symptomatically. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

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

Unsuitable
None known.

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

Advice for firefighters

In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

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

Flash point
> 98 - 101 °C

Autoignition temperature
no data available
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
Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

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

Reference to other sections
Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice.

Advice on protection against fire and explosion
Do not use this product in or on electrical equipment due to the possibility of shock hazard.

Hygiene measures
Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Remove soiled clothing immediately and clean thoroughly before using again.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers
Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Keep away from direct sunlight.

Advice on common storage
Keep away from food, drink and animal feedingstuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Components | CAS-No. | Control parameters | Update | Basis |
--- | --- | --- | --- | --- |
Clothianidin | 210880-92-5 | 2.8 mg/m³ (TWA) | | |
Glycerine (Total dust.) | 56-81-5 | 15 mg/m³ (PEL) | 02 2006 | OSHA Z1 |
Glycerine (Respirable fraction.) | 56-81-5 | 5 mg/m³ (PEL) | 02 2006 | OSHA Z1 |
Glycerine (Respirable fraction.) | 56-81-5 | 5 mg/m³ (TWA) | 1989 | OSHA Z1A |
Glycerine (Total dust.) | 56-81-5 | 10 mg/m³ (TWA) | 1989 | OSHA Z1A |
Glycerine (Total dust and mist.) | 56-81-5 | 10 mg/m³ (TWA) | 06 2008 | TN OEL |
Glycerine (Respirable fraction and dust or fume.) | 56-81-5 | 5 mg/m³ (TWA) | 06 2008 | TN OEL |
Glycerine (Particulate.) | 56-81-5 | 50 μg/m³ (ST ESL) | 02 2013 | TX ESL |
Glycerine (Particulate.) | 56-81-5 | 5 μg/m³ (AN ESL) | 02 2013 | TX ESL |
Glycerine (Vapor.) | 56-81-5 | 100 μg/m³ (AN ESL) | 02 2013 | TX ESL |
Glycerine (Vapor.) | 56-81-5 | 1000 μg/m³ (ST ESL) | 02 2013 | TX ESL |

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

**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**
Respiratory protection is not required under anticipated circumstances of exposure. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

**Hand protection**
Chemical resistant nitrile rubber gloves

**Eye protection**
Safety glasses with side-shields

**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.
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance white to beige
Physical State gel
Odor weak characteristic
Odour Threshold no data available
pH 4.7 - 5.2 at 1 % (23 °C) (CIPAC D water (342ppm))
Vapor Pressure no data available
Vapor Density (Air = 1) no data available
Density ca. 1.10 g/cm³
Evaporation rate no data available
Boiling Point no data available
Melting / Freezing Point no data available
Water solubility soluble
Minimum Ignition Energy not applicable
Decomposition temperature no data available
Partition coefficient: n-octanol/water no data available
Viscosity >= 20,000 mPa.s at 20 °C Velocity gradient 10 /s
Flash point > 98 - 101 °C
Autoignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Explosivity not applicable
Other information Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity
Thermal decomposition no data available
Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.
Conditions to avoid
Extremes of temperature and direct sunlight.

Incompatible materials
Store only in the original container.

Hazardous decomposition products
No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes
Eye contact, Skin contact, Ingestion

Information on toxicological effects

Acute oral toxicity
LD50 (rat) > 5,000 mg/kg

Acute inhalation toxicity
During intended and foreseen applications, no respirable aerosol is formed.

Acute dermal toxicity
LD50 (rat) > 5,000 mg/kg

Skin irritation
No skin irritation (rabbit)

Eye irritation
Minimally irritating. (rabbit)

Sensitisation
Non-sensitizing. (mouse)
OECD Test Guideline 429, local lymph node assay (LLNA)

Assessment repeated dose toxicity
Clothianidin did not cause specific target organ toxicity in experimental animal studies.

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

Assessment Carcinogenicity
Clothianidin was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH
None.

NTP
None.

IARC
None.

OSHA
None.

Assessment toxicity to reproduction
Clothianidin 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 Clothianidin is related to parental toxicity.

**Assessment developmental toxicity**

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

**Further information**

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

### SECTION 12: ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Toxicity to fish</th>
<th>LC50 (Rainbow trout (Oncorhynchus mykiss)) &gt; 104.2 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure time: 96 h</td>
</tr>
<tr>
<td></td>
<td>The value mentioned relates to the active ingredient clothianidin.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to aquatic invertebrates</th>
<th>EC50 (Water flea (Daphnia magna)) &gt; 40 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure time: 48 h</td>
</tr>
<tr>
<td></td>
<td>The value mentioned relates to the active ingredient clothianidin.</td>
</tr>
</tbody>
</table>

|                                  | EC15 (Chironomus riparius (non-biting midge)) 0.00072 mg/l |
|                                  | Exposure time: 28 d |
|                                  | The value mentioned relates to the active ingredient clothianidin. |

|                                  | EC50 (Chironomus riparius (non-biting midge)) 0.00106 mg/l |
|                                  | Exposure time: 28 d |
|                                  | The value mentioned relates to the active ingredient clothianidin. |

<table>
<thead>
<tr>
<th>Chronic toxicity to aquatic invertebrates</th>
<th>NOEC (Daphnia): 0.12 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure time: 21 d</td>
</tr>
<tr>
<td></td>
<td>The value mentioned relates to the active ingredient clothianidin.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to aquatic plants</th>
<th>IC50 (Pseudokirchneriella subcapitata) 70 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Growth rate; Exposure time: 72 h</td>
</tr>
<tr>
<td></td>
<td>The value mentioned relates to the active ingredient clothianidin.</td>
</tr>
</tbody>
</table>

|                            | EC50 (Lemna gibba (duckweed)) 270 mg/l |
|                            | Exposure time: 14 d |
|                            | The value mentioned relates to the active ingredient clothianidin. |

<table>
<thead>
<tr>
<th>Biodegradability</th>
<th>Clothianidin: ; not rapidly biodegradable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Koc</td>
<td>Clothianidin: Koc: 84 - 345</td>
</tr>
<tr>
<td>Bioaccumulation</td>
<td>Clothianidin: ; Does not bioaccumulate.</td>
</tr>
<tr>
<td>Mobility in soil</td>
<td>Clothianidin: Moderately mobile in soils</td>
</tr>
<tr>
<td>Additional ecological information</td>
<td>No other effects to be mentioned.</td>
</tr>
</tbody>
</table>
Environmental precautions  Do not allow to get into surface water, drains and ground water.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods
Product
It is best to use all of the 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.

Contaminated packaging
Do not re-use empty containers.
Place empty container in trash.
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. (CLOTHIANIDIN SOLUTION)

IATA
UN number 3082
Class 9
Packaging group III
Environm. Hazardous Mark YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CLOTHIANIDIN 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.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-1531
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
Glycerine 56-81-5

Environmental
CERCLA
None.
Clean Water Section 307 Priority Pollutants
None.
Safe Drinking Water Act Maximum Contaminant Levels
None.

International Regulations
European Inventory of Existing Commercial Substances (EINECS)
Glycerine 56-81-5

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:

Hazard statements: Keep exposed gel away from open food and food contact surfaces.

SECTION 16: OTHER INFORMATION
NFPA 704 (National Fire Protection Association):
Health - 0  Flammability - 1  Instability - 0  Others - none

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

Reason for Revision: The following sections have been revised: Section 14: Transport Information.

Revision Date: 06/24/2014

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.