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

Product identifier
Trade name: MAXFORCE® PROFESSIONAL INSECT CONTROL® ROACH KILLER BAIT GEL

Product code (UVP): 05938384
SDS Number: 102000001393
EPA Registration No.: 432-1254

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 no.
Emergency Telephone Number (24hr/7 days): 1-800-334-7577 (24 hours/day)
Product Information Telephone Number: 1-800-331-2867
SDS Information or Request: SDSINFO.BCS-NA@bayer.com

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200
Specific target organ toxicity - repeated exposure: Category 1
Reproductive toxicity: Category 1B

Signal word: Danger

Hazard statements
Causes damage to organs (kidneys, testes) through prolonged or repeated exposure.
May damage fertility or the unborn child.
Precautionary statements
Do not breathe vapours.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
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.
IF exposed or if you feel unwell:
Get medical advice/attention.
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>Hydramethylnon</td>
<td>67485-29-4</td>
<td>2.15</td>
</tr>
<tr>
<td>Oleic acid</td>
<td>112-80-1</td>
<td>2.15</td>
</tr>
<tr>
<td>Starch</td>
<td>9005-25-8</td>
<td>1.00</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
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.

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.

Most important symptoms and effects, both acute and delayed
Symptoms
Local: To date no symptoms are known.
Systemic: May cause stuffy or runny nose and scratchy throat, Lacrimation, Lethargy, Diarrhoea

Indication of any immediate medical attention and special treatment needed
Treatment
There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media
Suitable
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable
High volume water jet

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. 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
no data available

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
The nature of this product, when contained in commercial packs, makes spillage unlikely. However, if significant amounts are spilled nevertheless, the following advice is applicable. 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.

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. Ensure adequate ventilation.

Advice on protection against fire and explosion
No special precautions required.

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.

Advice on common storage
Keep away from food, drink and animal feedingstuffs.
SECTION 8: EXPOSURE CONTROLS/PERSONAL 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>Hydramethylnon</td>
<td>67485-29-4</td>
<td>1.4ug/m³ (AN ESL)</td>
<td>07 2011</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Hydramethylnon</td>
<td>67485-29-4</td>
<td>14ug/m³ (ST ESL)</td>
<td>07 2011</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Starch</td>
<td>9005-25-8</td>
<td>10 mg/m³ (TWA)</td>
<td>02 2012</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Starch (Respirable.)</td>
<td>9005-25-8</td>
<td>5 mg/m³ (REL)</td>
<td>2010</td>
<td>NIOSH</td>
</tr>
<tr>
<td>Starch (Total)</td>
<td>9005-25-8</td>
<td>10 mg/m³ (REL)</td>
<td>2010</td>
<td>NIOSH</td>
</tr>
<tr>
<td>Starch (Total dust.)</td>
<td>9005-25-8</td>
<td>15 mg/m³ (PEL)</td>
<td>02 2006</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>Starch (Respirable fraction.)</td>
<td>9005-25-8</td>
<td>5 mg/m³ (PEL)</td>
<td>02 2006</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>Starch (Respirable fraction.)</td>
<td>9005-25-8</td>
<td>5 mg/m³ (TWA)</td>
<td>1989</td>
<td>OSHA Z1A</td>
</tr>
<tr>
<td>Starch (Total dust.)</td>
<td>9005-25-8</td>
<td>15 mg/m³ (TWA)</td>
<td>1989</td>
<td>OSHA Z1A</td>
</tr>
<tr>
<td>Starch (Respirable fraction.)</td>
<td>9005-25-8</td>
<td>5 mg/m³ (TWA)</td>
<td>06 2008</td>
<td>TN OEL</td>
</tr>
<tr>
<td>Starch (Total dust.)</td>
<td>9005-25-8</td>
<td>15 mg/m³ (TWA)</td>
<td>06 2008</td>
<td>TN OEL</td>
</tr>
<tr>
<td>Starch (Particulate.)</td>
<td>9005-25-8</td>
<td>50ug/m³ (ST ESL)</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Starch (Particulate.)</td>
<td>9005-25-8</td>
<td>5ug/m³ (AN ESL)</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
</tbody>
</table>

No control parameters known.

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.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>brown</td>
</tr>
<tr>
<td>Physical State</td>
<td>gel</td>
</tr>
<tr>
<td>Odor</td>
<td>odourless</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>no data available</td>
</tr>
<tr>
<td>pH</td>
<td>6.5 - 7.5</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>no data available</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>no data available</td>
</tr>
<tr>
<td>Density</td>
<td>ca. 1.10 g/cm³</td>
</tr>
<tr>
<td>Evapouration rate</td>
<td>no data available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>no data available</td>
</tr>
<tr>
<td>Melting / Freezing Point</td>
<td>no data available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>partly soluble</td>
</tr>
<tr>
<td>Minimum Ignition Energy</td>
<td>not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>no data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>ca. 140,000 - 300,000 mPa.s at 25 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>no data available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>no data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>no data available</td>
</tr>
<tr>
<td>Explosivity</td>
<td>not applicable</td>
</tr>
</tbody>
</table>
SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition no data available
Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions No hazardous reactions when stored and handled according to prescribed instructions.
Conditions to avoid Extremes of temperature and direct sunlight.
Incompatible materials no data available
Hazardous decomposition products No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Ingestion, Skin Absorption, Eye contact

Immediate Effects
Eye Moderate eye irritation.
Skin Harmful if absorbed through skin.
Ingestion Harmful if swallowed.

Information on toxicological effects

Acute oral toxicity LD50 (rat) > 5,000 mg/kg
Acute dermal toxicity LD50 (rabbit) > 2,000 mg/kg
Skin irritation No skin irritation (rabbit)
Eye irritation No eye irritation (rabbit)
Sensitisation Non-sensitizing. (guinea pig) OECD Test Guideline 406, Buehler test

Assessment repeated dose toxicity

Hydramethylnon caused specific target organ toxicity in experimental animal studies in the following organ(s): testes, kidneys.

Assessment Mutagenicity

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

Assessment Carcinogenicity

Hydramethylnon was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH
Assessment toxicity to reproduction

Hydramethylnon caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. Hydramethylnon caused testicular damage and male infertility.

Assessment developmental toxicity

Hydramethylnon caused developmental toxicity only at dose levels toxic to the dams. Hydramethylnon caused a delayed foetal growth.

Further information

Acute toxicity studies have been bridged from a similar formulation(s). The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish

<table>
<thead>
<tr>
<th>Compound</th>
<th>Concentration</th>
<th>Exposure time</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 (Rainbow trout (Oncorhynchus mykiss))</td>
<td>0.16 mg/l</td>
<td>96 h</td>
<td>The value mentioned relates to the active ingredient hydramethylnon.</td>
</tr>
</tbody>
</table>

Toxicity to aquatic invertebrates

<table>
<thead>
<tr>
<th>Compound</th>
<th>Concentration</th>
<th>Exposure time</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 (Water flea (Daphnia magna))</td>
<td>1.14 mg/l</td>
<td>48 h</td>
<td>The value mentioned relates to the active ingredient hydramethylnon.</td>
</tr>
</tbody>
</table>

Toxicity to aquatic plants

<table>
<thead>
<tr>
<th>Compound</th>
<th>Concentration</th>
<th>Exposure time</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 (Selenastrum capricornutum)</td>
<td>0.005 - 0.018 mg/l</td>
<td>72 h</td>
<td>The value mentioned relates to the active ingredient hydramethylnon.</td>
</tr>
</tbody>
</table>

Biodegradability

Hydramethylnon: ; not rapidly biodegradable

Koc

Hydramethylnon: Koc: 730000

Bioaccumulation

Hydramethylnon: Bioconcentration factor (BCF) 34,900; Does not bioaccumulate.

Mobility in soil

Hydramethylnon: Immobile in soil

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.
Apply this product as specified on the label.
SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product
Follow container label instructions for disposal of wastes generated during use in compliance with the product label. 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. (HYDRAMETHYLNON SOLUTION)

IATA
UN number 3082
Class 9
Packaging group III
Environm. Hazardous Mark YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (HYDRAMETHYLNON 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. 432-1254

US Federal Regulations

TSCA list
- Oleic acid 112-80-1
- Starch 9005-25-8

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
- Hydramethylnon 67485-29-4 25,000 lbs

US States Regulatory Reporting
- CA Prop65
  This product does not contain any substances known to the State of California to cause cancer.

This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
- Hydramethylnon 67485-29-4 Developmental toxin.
- Hydramethylnon 67485-29-4 Male reproductive toxin.

US State Right-To-Know Ingredients
- Hydramethylnon 67485-29-4 NJ
- Oleic acid 112-80-1 RI
- Starch 9005-25-8 MN

Canadian Regulations
Canadian Domestic Substance List
- Oleic acid 112-80-1
- Starch 9005-25-8

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)
- Starch 9005-25-8

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 or absorbed through skin.
Moderate eye irritation.
Avoid contact with skin, eyes and clothing.
Keep exposed gel away from open food and food contact surfaces.

SECTION 16: OTHER INFORMATION

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

Health - 1  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: 09/08/2014

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