SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

<table>
<thead>
<tr>
<th>Product name</th>
<th>SUSPEND® SC INSECTICIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDS Number</td>
<td>102000003167</td>
</tr>
<tr>
<td>Product code (UVP)</td>
<td>05946468</td>
</tr>
<tr>
<td>EPA Registration No.</td>
<td>432-763</td>
</tr>
<tr>
<td>Product Use</td>
<td>Insecticide</td>
</tr>
</tbody>
</table>

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. HAZARDS IDENTIFICATION

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

<table>
<thead>
<tr>
<th>Emergency Overview</th>
<th>Caution! Harmful if inhaled. Do not breathe vapours or spray mist. Contact with product may result in transient tingling and reddening of the skin. Remove and wash contaminated clothing before re-use.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>liquid suspension</td>
</tr>
<tr>
<td>Odor</td>
<td>none</td>
</tr>
<tr>
<td>Appearance</td>
<td>white</td>
</tr>
<tr>
<td>Exposure routes</td>
<td>Inhalation, Skin contact, Eye contact, Ingestion</td>
</tr>
<tr>
<td>Immediate Effects</td>
<td></td>
</tr>
<tr>
<td>Eye</td>
<td>May cause eye irritation. Avoid contact with eyes.</td>
</tr>
<tr>
<td>Skin</td>
<td>Contact with product may result in transient tingling and reddening of the skin. Avoid contact with skin and clothing.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Do not take internally.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Harmful if inhaled. Do not breathe vapours or spray mist.</td>
</tr>
<tr>
<td>Chronic or Delayed Reader: (chronic)</td>
<td>This product or its components may have target organ effects. This product or its components may have long term (chronic) health effects.</td>
</tr>
</tbody>
</table>
Potential Environmental Effect
Extremely toxic to fish and aquatic invertebrates. Highly toxic to bees.

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>Deltamethrin</td>
<td>52918-63-5</td>
<td>4.75</td>
</tr>
<tr>
<td>1,2-Propanediol</td>
<td>57-55-6</td>
<td>15.20</td>
</tr>
<tr>
<td>Nonylphenol ethoxylate, branched</td>
<td>127087-87-0</td>
<td>2.85</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
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.

Skin
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.

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.

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

SECTION 5. FIRE FIGHTING MEASURES

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<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 Flammability Limit</td>
<td>not applicable</td>
</tr>
</tbody>
</table>
Upper Flammability Limit  not applicable
Explosiveness no data available
Suitable extinguishing media Carbon dioxide (CO2), Dry chemical, Foam, Water

Fire Fighting Instructions
Evacuate personnel to safe areas. 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.

Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions Isolate hazard area. Keep unauthorized people away. 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. Decontaminate tools and equipment following cleanup. 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 Avoid contact with skin, eyes and clothing. Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation. Keep away from heat and sources of ignition.

Storing Procedures Store in original container. 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. Protect from freezing.

Work/Hygienic Procedures Smoking, eating and drinking should be prohibited in the application area. 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
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 warm/tepid water. Keep and wash PPE separately from other laundry.

Follow all label instructions. Train employees in safe use of the product.

Eye/Face Protection
Tightly fitting safety goggles

Hand protection
Chemical-resistant gloves made of waterproof material such as neoprene, butyl rubber, barrier laminate or nitrile rubber.

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>Substance</th>
<th>CAS Number</th>
<th>Exposure Standard</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deltamethrin</td>
<td>52918-63-5</td>
<td>OES BCS*</td>
<td>TWA 0.02 mg/m³</td>
</tr>
<tr>
<td>Silicon dioxide</td>
<td>7631-86-9</td>
<td>NIOSH REL</td>
<td>6 mg/m³</td>
</tr>
<tr>
<td>1,2-Propanediol</td>
<td>57-55-6</td>
<td>WEEL TWA</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>TX ESL</td>
<td></td>
<td>ST ESL 50 ug/m³</td>
<td></td>
</tr>
<tr>
<td>TX ESL</td>
<td></td>
<td>ST ESL 1000 ug/m³</td>
<td></td>
</tr>
<tr>
<td>TX ESL</td>
<td></td>
<td>AN ESL 5 ug/m³</td>
<td></td>
</tr>
<tr>
<td>TX ESL</td>
<td></td>
<td>AN ESL 100 ug/m³</td>
<td></td>
</tr>
<tr>
<td>TX ESL</td>
<td></td>
<td>ST ESL 500 ppb</td>
<td></td>
</tr>
<tr>
<td>TX ESL</td>
<td></td>
<td>AN ESL 50 ppb</td>
<td></td>
</tr>
<tr>
<td>TX ESL</td>
<td></td>
<td>ST ESL 600 ug/m³</td>
<td></td>
</tr>
<tr>
<td>Nonylphenol ethoxylate, branched</td>
<td>127087-87-0</td>
<td>TX ESL AN ESL</td>
<td>60 ug/m³</td>
</tr>
</tbody>
</table>

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
white

Physical State
liquid suspension

Odor
none
pH <= 7.0 (100 %)

Vapor Pressure no data available

Density ca. 1.05 g/cm³ at 20 °C

Evaporation rate no data available

Boiling Point no data available

Melting / Freezing Point no data available

Water solubility immiscible

Minimum Ignition Energy no data available

Decomposition temperature no data available

Partition coefficient: n-octanol/water no data available

Viscosity 1,300 - 1,800 cps

### SECTION 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Conditions to avoid</th>
<th>freezing</th>
</tr>
</thead>
</table>
| Incompatibility     | Strong oxidizing agents  
                      | Strong reducing agents |
| Hazardous Decomposition Products | Thermal decomposition can lead to release of:  
                              | Carbon monoxide  
                              | Carbon dioxide (CO2) |
| Hazardous reactions | No hazardous reactions when stored and handled according to prescribed instructions. |
| Chemical Stability  | Stable under normal conditions. |

### SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity data have been bridged from a similar formulation containing a slightly higher percentage of the active ingredient, deltamethrin. The non-acute information pertains to the technical-grade active ingredient.

**Acute oral toxicity**

rat: LD₅₀: > 15,000 mg/kg
Acute dermal toxicity  rabbit: LD50: > 10,000 mg/kg

Acute inhalation toxicity
rat: LC50: > 1.02 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.
Highest attainable concentration.
No deaths
rat: LC50: > 4.08 mg/l
Exposure time: 1 h
Determined in the form of liquid aerosol.
Extrapolated from the 4 hr LC50.

Skin irritation  rabbit: Slight irritation

Eye irritation  rabbit: Minimally irritating.

Sensitisation  guinea pig: Non-sensitizing.

Chronic toxicity  Deltamethrin caused neurobehavioral effects and/or neuropathological changes in animal studies. The toxic effects of Deltamethrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

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

ACGIH
None.

NTP
None.

IARC
Deltamethrin  52918-63-5  Overall evaluation: 3

OSHA
None.

Reproductive toxicity  Deltamethrin did not cause reproductive toxicity in a two-generation study in rats.

Developmental Toxicity  Deltamethrin caused developmental toxicity only at doses toxic to the dams. The developmental effects seen with Deltamethrin are related to maternal toxicity.

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

SECTION 12. ECOLOGICAL INFORMATION

Toxicity to fish  Oncorhynchus mykiss (rainbow trout)
LC50: 0.00026 mg/l
Exposure time: 96 h

Lepomis macrochirus (Bluegill sunfish)
LC50: 0.00017 mg/l
Exposure time: 96 h

**Acute Toxicity to Aquatic Invertebrates**

Eastern Oyster
LC50: 0.0082 mg/l
Exposure time: 96 h

Mysidopsis bahia (mysid shrimp)
LC50: 0.000001 mg/l
Exposure time: 96 h

**Stability in water**

Half life: 55 - 65 h
pH: 9.0

**Bioaccumulation**

Lepomis macrochirus (Bluegill sunfish) BCF: 189 - 3,930

**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. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Apply this product as specified on the label.

### SECTION 13. DISPOSAL CONSIDERATIONS

#### General Disposal Guidance

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. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### Container Disposal

Triple rinse containers. Add washings to sprayer at time of filling. 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
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTAMETHRIN SOLUTION)

IATA
UN-Number 3082
Class 9
Packaging group III
Environm. Hazardous Mark YES
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTAMETHRIN 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. 432-763
US Federal Regulations
TSCA list
1,2-Propanediol 57-55-6
Nonylphenol ethoxylate, branched 127087-87-0
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
1,2-Propanediol 57-55-6
Nonylphenol ethoxylate, branched 127087-87-0

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)
Deltamethrin 52918-63-5
1,2-Propanediol 57-55-6

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. The following sections have been revised: Section 3: Composition / Information on Ingredients. Section 8: Exposure Controls / Personal Protection. Section 9: Physical and Chemical Properties.

Revision Date: 06/06/2012

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