SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: BAYER ADVANCED ALL-IN-ONE LAWN WEED & CRABGRASS KILLER READY-TO-SPRAY

MSDS Number: 102000015602

EPA Registration No.: 2217-894-72155

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. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component Name</th>
<th>CAS-No.</th>
<th>Average % by Weight</th>
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<tbody>
<tr>
<td>2,4-D, dimethylamine salt</td>
<td>2008-39-1</td>
<td>4.85</td>
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<tr>
<td>Quinclorac</td>
<td>84087-01-4</td>
<td>1.61</td>
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<tr>
<td>Dicamba, dimethylamine salt</td>
<td>2300-66-5</td>
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</table>

SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview: Caution! Harmful if swallowed. Moderate eye irritation. Avoid contact with skin, eyes and clothing. Avoid breathing spray mist.

Physical State: opaque liquid

Odor: mild sweet

Appearance: brown to black

Routes of Exposure: Skin contact, Inhalation, Ingestion

Immediate Effects:
- Eye: Moderate eye irritation. Do not get in eyes.
- Skin: Moderate skin irritation. Harmful if absorbed through skin. Avoid contact with skin and clothing.
Ingestion
Harmful if swallowed. Do not take internally.

Inhalation
Irritation of mucous membranes. Mists may cause respiratory tract irritation, coughing, a burning sensation. Harmful if inhaled. Avoid breathing spray mist.

Chronic or Delayed Long-Term
This product contains ingredients that are considered to be probable or suspected human carcinogens (see Section 11 - Chronic).

Medical Conditions Aggravated by Exposure
Skin contact may aggravate existing skin disease. Individuals with allergic history or pre-existing dermatitis should use extra care in handling this product.

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
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
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 Signs and Symptoms
Inhalation may provoke the following symptoms:
- burning sensation
- discomfort in the chest
- cough
- dizziness

Ingestion may provoke the following symptoms:
- vomiting
- discomfort in the chest
- abdominal pain
- diarrhoea

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
54.5 °C / 130.1 °F
Test type: closed cup

Fire and Explosion Hazards
In case of fire the evolution of dangerous gases is possible.

Suitable Extinguishing Media
foam, carbon dioxide (CO2), dry chemical, water

Fire Fighting Instructions
Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Dike area to prevent runoff and contamination of water sources. Inform authorities at once if material enters sewers or watercourses. Equipment or materials involved in pesticide fires may become contaminated.

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

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
Take up with absorbent material (e.g. sand, diatomaceous earth or a proprietary absorbent material). Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional Advice
Use personal protective equipment. Do not allow product to enter streams, sewers or other waterways.

SECTION 7. HANDLING AND STORAGE

Handling Procedures
Handle and open container in a manner as to prevent spillage.

Storing Procedures
Do not contaminate water, food, or feed by storage or disposal. Store in original container and out of the reach of children, preferably in a locked storage area. Do not freeze.

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.
Take off contaminated clothing and shoes immediately. Then wash thoroughly and put on clean clothing.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. As soon as practical, wash thoroughly and change into clean clothing.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Protection
Follow all label instructions. 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.

Engineering Controls
Ensure adequate ventilation. Use with local exhaust ventilation.

Eye/Face Protection
tightly fitting safety goggles

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance  brown to black
Physical State  opaque liquid
Odor  mild sweet
pH  7.5 - 8.5 (100 %)
Vapor Pressure  2.266 kPa / 17 mm Hg at 20 °C
Density  ca. 1.02 g/cm³ at 20 °C
Boiling Point  100 °C / 212 °F
Melting / Freezing Point  < 1.7 °C / 35.1 °F
**SECTION 10. STABILITY AND REACTIVITY**

**Chemical Stability**
Stable under normal conditions.

**Incompatibility**
acids

**Hazardous Decomposition Products**
In case of fire hazardous decomposition products may be produced such as:

- hydrogen chloride (HCl)
- nitrogen oxides (NOx)
- Carbon monoxide

**SECTION 11. TOXICOLOGICAL INFORMATION**

**Eye Irritation**
Mild eye irritation.

**Assessment Carcinogenicity**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Description</th>
<th>Code</th>
<th>Classification</th>
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<td>ACGIH</td>
<td>2,4-D, dimethylamine salt</td>
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<td>Group A4</td>
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<td>NTP</td>
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<td>IARC</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>None.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 12. ECOLOGICAL INFORMATION**

**Environmental Precautions**
Toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and non-target plants. 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

**General Disposal Guidance**

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. 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**

Do not re-use empty containers. Triple rinse containers. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

**RCRA Classification:**

The RCRA Classifications may be on the individual component(s) and not necessarily on the product as a whole.

- **2008-39-1**
  - 2,4-D, dimethylamine salt

- **2008-39-1**
  - 2,4-D, dimethylamine salt

SECTION 14. TRANSPORT INFORMATION

**TRANSPORTATION CLASSIFICATION:**

Not regulated for Domestic Surface Shipment

**FREIGHT CLASSIFICATION:**

Compounds, Tree or WeedKilling, N.O.I., other than poison, Having a density of greater than 20 LBS. per cubic foot

SECTION 15. REGULATORY INFORMATION

**EPA Registration No.**

2217-894-72155

**US Federal Regulations**

- **TSCA list**
  - None.

- **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**

Page 6 of 7
None.

**US States Regulatory Reporting**

**CA Prop 65**
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**

2,4-D, dimethylamine salt 2008-39-1 CT

**Canadian Regulations**

**Canadian Domestic Substance List**

Quinclorac 84087-01-4

**Environmental**

**CERCLA**

2,4-D, dimethylamine salt 2008-39-1 100 lbs

**Clean Water Section 307 Priority Pollutants**

None.

**Safe Drinking Water Act Maximum Contaminant Levels**

None.

**International Regulations**

**European Inventory of Existing Commercial Substances (EINECS)**

2,4-D, dimethylamine salt 2008-39-1

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**SECTION 16. OTHER INFORMATION**

NFPA 704 (National Fire Protection Association):

Health - 2 Flammability - 1 Reactivity - 0 Others - none
0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason to Revise: New Material Safety Data Sheet.

Revision Date: 06/30/2006

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.