Dow AgroSciences LLC encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. Product and Company Identification

Product Name
RODEO Herbicide

COMPANY IDENTIFICATION
Dow AgroSciences LLC
A Subsidiary of The Dow Chemical Company
9330 Zionsville Road
Indianapolis, IN 46268-1189
USA

Customer Information Number: 800-992-5994
SDSQuestion@dow.com

EMERGENCY TELEPHONE NUMBER
24-Hour Emergency Contact: 800-992-5994
Local Emergency Contact: 352-323-3500

2. Hazards Identification

Emergency Overview
Color: Yellow
Physical State: Liquid.
Odor: Odorless
Hazardous product:

CAUTION! Combustible liquid and vapor. Vapor explosion hazard. Vapors may travel a long distance; ignition and/or flash back may occur. Isolate area. Stay out of low areas. Warn public of downwind explosion hazard. Eliminate ignition sources.

OSHA Hazard Communication Standard
This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Health Effects

Eye Contact: May cause slight temporary eye irritation. Corneal injury is unlikely.
Skin Contact: Essentially nonirritating to skin.
Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts.
Inhalation: Brief exposure (minutes) is not likely to cause adverse effects.
Ingestion: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.
Effects of Repeated Exposure: For similar material(s): Glyphosate. In animals, effects have been reported on the following organs: Liver.

3. Composition Information

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glyphosate IPA salt</td>
<td>38641-94-0</td>
<td>53.8 %</td>
</tr>
<tr>
<td>Isopropylamine</td>
<td>75-31-0</td>
<td>1.0 %</td>
</tr>
<tr>
<td>Balance</td>
<td>Not available</td>
<td>45.2 %</td>
</tr>
</tbody>
</table>

4. First-aid measures

Description of first aid measures
Inhalation: Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.
Skin Contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Eye Contact: Hold eyes 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 eyes. Call a poison control center or doctor for treatment advice.
Ingestion: No emergency medical treatment necessary.
Most important symptoms and effects, both acute and delayed
Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), no additional symptoms and effects are anticipated.
Indication of immediate medical attention and special treatment needed
No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.

5. Fire Fighting Measures

Suitable extinguishing media
To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Straight or direct water streams may not be effective to extinguish fire. General purpose synthetic foams (including AFFF type) or protein foams are preferred if available. Alcohol resistant foams (ATC type) may function.

Special hazards arising from the substance or mixture
Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.
Unusual Fire and Explosion Hazards: This material will not burn until the water has evaporated. Residue can burn. Container may vent and/or rupture due to fire. Electrically ground and bond all equipment. Flammable mixtures of this product are readily ignited even by static discharge. May produce flash fire. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Flammable mixtures may exist within the vapor space of containers at room temperature.
Advice for firefighters
Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Stay upwind. Keep out of low areas where gases (fumes) can accumulate. Water may not be effective in extinguishing fire. Eliminate ignition sources. Move container from fire area if this is possible without hazard. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the “Accidental Release Measures” and the “Ecological Information” sections of this (M)SDS.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Isolate area. Refer to Section 7, Handling, for additional precautionary measures. Keep unnecessary and unprotected personnel from entering the area. Keep personnel out of low areas. No smoking in area. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Vapor explosion hazard. Keep out of sewers. For large spills, warn public of downwind explosion hazard. Check area with combustible gas detector before reentering area. Ground and bond all containers and handling equipment. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up: Contain spilled material if possible. Pump with explosion-proof equipment. If available, use foam to smother or suppress. Absorb with materials such as: Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Dow AgroSciences for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

7. Handling and Storage

Handling

General Handling: Keep away from heat, sparks and flame. No smoking, open flames or sources of ignition in handling and storage area. Electrically bond and ground all containers and equipment before transfer or use of material. Use of non-sparking or explosion-proof equipment may be necessary, depending upon the type of operation. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Never use air pressure for transferring product. Keep out of reach of children. Do not swallow. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling. Keep container closed.

Storage

Minimize sources of ignition, such as static build-up, heat, spark or flame. Keep container closed. Do not store in: Carbon steel. Galvanized containers. Steel. Flammable mixtures may exist within the vapor space of containers at room temperature. Store in a dry place. Store in original container. Do not store near food, foodstuffs, drugs or potable water supplies.
8. Exposure Controls / Personal Protection

Exposure Limits

<table>
<thead>
<tr>
<th>Component</th>
<th>List</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropylamine</td>
<td>ACGIH</td>
<td>TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>STEL</td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA Table</td>
<td>PEL</td>
<td>12 mg/m3 5 ppm</td>
</tr>
<tr>
<td></td>
<td>Z-1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

Personal Protection

Eye/Face Protection: Use safety glasses (with side shields).

Skin Protection: No precautions other than clean body-covering clothing should be needed.

Hand protection: Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Controls

Ventilation: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

9. Physical and Chemical Properties

Appearance
- Physical State: Liquid.
- Color: Yellow
- Odor: Odorless
- Odor Threshold: No test data available
- pH: 4.6 (@ 1 %) NAPM 11A.00 1% aqueous solution.
- Melting Point: Not applicable
- Freezing Point: No test data available
- Boiling Point (760 mmHg): 110 °C (230 °F)
- Flash Point - Closed Cup: > 93 °C (> 199 °F) Setaflash Closed Cup ASTMD3828 none below boiling point
- Evaporation Rate (Butyl Acetate = 1): No test data available
- Flammable Limits In Air: Lower: No test data available, Upper: No test data available
- Vapor Pressure: No test data available
- Vapor Density (air = 1): No test data available
- Specific Gravity (H2O = 1): 1.211 22 °C/4 °C Pyknometer
- Solubility in water (by weight): Soluble
- Autoignition Temperature: none below 400degC
- Decomposition: No test data available
- Temperature
- Dynamic Viscosity: 64.6 mPa.s @ 20 °C
- Kinematic Viscosity: 53.4 mm2/s @ 20 °C
- Liquid Density: 1.20 g/ml @ 20 °C Digital density meter
10. Stability and Reactivity

Reactivity
No dangerous reaction known under conditions of normal use.

Chemical stability
Thermally stable at recommended temperatures and pressures.

Possibility of hazardous reactions
Polymerization will not occur.

Conditions to Avoid: Active ingredient decomposes at elevated temperatures. Avoid static discharge.

Incompatible Materials: Heat produced by the reaction with water will cause vaporization. Flammable hydrogen may be generated from contact with metals such as:

Hazardous decomposition products
Decomposition products depend upon temperature, air supply and the presence of other materials.

11. Toxicological Information

Acute Toxicity
Ingestion
- LD50, Rat > 5,000 mg/kg

Dermal
- LD50, Rabbit > 5,000 mg/kg

Inhalation
- LC50, 4 h, Aerosol, Rat > 6.37 mg/l

Eye damage/eye irritation
- May cause slight temporary eye irritation. Corneal injury is unlikely.

Skin corrosion/irritation
- Essentially nonirritating to skin.

Sensitization
Skin
- Did not cause allergic skin reactions when tested in guinea pigs.

Repeated Dose Toxicity
- For similar material(s): Glyphosate. In animals, effects have been reported on the following organs: Liver.

Chronic Toxicity and Carcinogenicity
- For similar material(s): Glyphosate. Did not cause cancer in laboratory animals.

Developmental Toxicity
- For the active ingredient(s): Available data are inadequate for evaluation of potential to cause birth defects.

Reproductive Toxicity
- For the active ingredient(s): Available data are inadequate to determine effects on reproduction.

Genetic Toxicology
- For the active ingredient(s): In vitro genetic toxicity studies were negative in some cases and positive in other cases. For similar material(s): Glyphosate. In vitro genetic toxicity studies were negative. For similar material(s): Glyphosate. Animal genetic toxicity studies were negative.

12. Ecological Information

Toxicity
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 > 100 mg/L in the most sensitive species tested). Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).
Fish Acute & Prolonged Toxicity
- LC50, rainbow trout (Oncorhynchus mykiss), 96 h: > 2,500 mg/l

Aquatic Invertebrate Acute Toxicity
- EC50, water flea Daphnia magna, 48 h, immobilization: 918 mg/l

Aquatic Plant Toxicity
- EC50, green alga Pseudokirchneriella subcapitata (formerly known as Selenastrum capricornutum), biomass growth inhibition, 72 h: 10 - 127 mg/l

Aquatic Plant Toxicity
- EC50, rainbow trout (Oncorhynchus mykiss), 96 h: > 2,500 mg/l

Toxicity to Above Ground Organisms
- oral LD50, bobwhite (Colinus virginianus): > 2,000 mg/kg
- contact LD50, Honey bee (Apis mellifera): > 100 ug/bee
- oral LD50, Honey bee (Apis mellifera): > 100 ug/bee

Persistence and Degradability
- Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. For similar active ingredient(s). Biodegradation may occur under aerobic conditions (in the presence of oxygen).

Bioaccumulative potential
- Bioaccumulation: For similar active ingredient(s). Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Mobility in soil
- Mobility in soil: For similar active ingredient(s). Expected to be relatively immobile in soil (Koc > 5000).

13. Disposal Considerations

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

14. Transport Information

- DOT Non-Bulk
  NOT REGULATED

- DOT Bulk
  NOT REGULATED

- IMDG
  NOT REGULATED

- ICAO/IATA
  NOT REGULATED

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the
transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

### 15. Regulatory Information

#### OSHA Hazard Communication Standard
This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

<table>
<thead>
<tr>
<th>Immediate (Acute) Health Hazard</th>
<th>Delayed (Chronic) Health Hazard</th>
<th>Fire Hazard</th>
<th>Reactive Hazard</th>
<th>Sudden Release of Pressure Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

#### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

#### Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:
The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropylamine</td>
<td>75-31-0</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

#### Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

#### Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103
This product contains the following substances which are subject to CERCLA Section 103 reporting requirements and which are listed in 40 CFR 302.4.

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</table>

#### California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)
This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

#### Toxic Substances Control Act (TSCA)
All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

### 16. Other Information

#### Hazard Rating System

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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Revision
Identification Number: 61082 / 1016 / Issue Date 07/06/2011 / Version: 2.0
DAS Code: NAF-552
Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

<table>
<thead>
<tr>
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<tr>
<td>W/W</td>
<td>Weight/Weight</td>
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<tr>
<td>OEL</td>
<td>Occupational Exposure Limit</td>
</tr>
<tr>
<td>STEL</td>
<td>Short Term Exposure Limit</td>
</tr>
<tr>
<td>TWA</td>
<td>Time Weighted Average</td>
</tr>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists, Inc.</td>
</tr>
<tr>
<td>DOW IHG</td>
<td>Dow Industrial Hygiene Guideline</td>
</tr>
<tr>
<td>WEEL</td>
<td>Workplace Environmental Exposure Level</td>
</tr>
<tr>
<td>HAZ DES</td>
<td>Hazard Designation</td>
</tr>
</tbody>
</table>

Action Level: A value set by OSHA that is lower than the PEL which will trigger the need for activities such as exposure monitoring and medical surveillance if exceeded.

Dow AgroSciences LLC urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer’s/user’s responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user’s duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.