SAFETY DATA SHEET

1. Product Identification:

Product Name: REPAR WEED AND FEED

Manufacturer: Repar Corporation
Telephone: 202-223-1424
Address: P.O. Box 4321, Silver Spring, MD 20914
City, State, Zip: Silver Spring, MD 20914
Emergency Phone: 202-223-1424 (Monday-Friday, 10:00 a.m. – 6:00 p.m.)

24 Hour Emergency Phone (CHEMTREC): 1-800-424-9300
U.S. EPA Registration No.: 69361-2
Product Use: Plant Growth Regulator

2. Health Hazard(s) Identification:


HEALTH HAZARDS: CAUTION! May cause irritation to eyes.
PHYSICAL HAZARDS: May release toxic fumes if burned.
ENVIRONMENTAL HAZARDS: Moderately toxic to aquatic organisms and phytotoxic to many non-target terrestrial plant species.

3. Composition/Ingredient Information:

Chemical Names: Active Ingredients:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Percentage by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl 2-chloro-9-hydroxy-9H-fluorene-9-carboxylate</td>
<td>2536-31-4</td>
<td>0.48%</td>
</tr>
<tr>
<td>Methyl 2,7-dichloro-9-hydroxy-9H-fluorene-9-carboxylate</td>
<td>21634-96-8</td>
<td>0.09%</td>
</tr>
<tr>
<td>Methyl 9-hydroxy-9H-fluorene-9-carboxylate</td>
<td>1216-44-0</td>
<td>0.12%</td>
</tr>
<tr>
<td>3,6-dichloro-o-anisic acid</td>
<td>1918-00-9</td>
<td>0.13%</td>
</tr>
</tbody>
</table>

Common Name for Active Ingredients:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Percentage by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorflurenol Methyl Ester (CFM)</td>
<td>37339-61-0</td>
<td>0.69%</td>
</tr>
<tr>
<td>Dicamba</td>
<td>1918-00-9</td>
<td>0.13%</td>
</tr>
</tbody>
</table>

Other Ingredients:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic solvents and emulsifiers</td>
<td>N/A</td>
</tr>
<tr>
<td>*Inert ingredient identity is confidential business information</td>
<td>99.18%</td>
</tr>
</tbody>
</table>

4. First Aid Measures:

If in Eyes:
- 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.
- Call a poison control center or doctor for treatment advice.

If Swallowed:
- Call a poison control center or doctor immediately for treatment advice.
- Have a person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.

If on Skin or Clothing:
- 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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

5. Fire Fighting Measures:

EXTINGUISHING MEDIA: Foam, dry chemical, water.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Burning may produce irritating or poisonous products of decomposition.

SPECIAL PROTECTIVE ACTIONS FOR FIRE FIGHTERS: Wear self contained breathing apparatus for fire fighting if necessary.

6. Accidental Release Measures:

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

PERSONAL PRECAUTIONS: Follow protective measures indicated in Section 8: Exposure Control/Personal Protection for both emergency and non emergency personnel.
ENVIROMENTAL PRECAUTIONS: Keep spills from entering lakes or waterways.

METHODS FOR CLEANING UP: Pick up or shovel material into waste container taking care to minimize dust. Wet down if necessary to control dust. Vacuum clean dust.

7. Handling and Storage:

HANDLING AND STORAGE PRECAUTIONS:

HANDLING: Avoid eye and skin contact and avoid breathing dusts if generated. Good housekeeping is recommended to prevent the accumulation of dust. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse. Avoid unintentional spilling or release into environment.

STORAGE: Store in original container in a locked storage area. Keep container closed and away from food, feedstuffs and domestic water supplies.

8. Exposure Control/Personal Protection:

EXPOSURE GUIDELINES: Occupational exposure limit (OEL) and biological limit values (BLV) for Chlorflurenol – CAS No.: 37339-61-0 and Dicamba – CAS No.: 1918-00-9 not established. Control banding approach not available.

APPROPRIATE ENGINEERING CONTROLS: Product is to be used out of doors with good ambient ventilation. Do not allow children or pets into treated area until after the product has been watered in.

WORK/HYGIENE PRACTICES: Emergency shower and eyewash facilities should be in close proximity (ANSI Z358.1). Launder contaminated clothing and wash hands after the product has been watered in.

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9. Physical & Chemical Properties:

APPEARANCE: Light brown crystalline solid
ODOR: No odor
ODOR THRESHOLD: NA
pH: NA
MELTING POINT: NA
BOILING POINT: NA
FLASH POINT: NA
EVAPORATION RATE: ND
FLAMMABILITY (solid, gas): Not flammable
LOWER FLAMMABILITY LIMIT: NA
UPPER FLAMMABILITY LIMIT: NA
VAPOR PRESSURE: NA
VAPOR DENSITY: NA
RELATIVE DENSITY (H2O = 1): 0.16 g/ml
SOLUBILITY: Forms a suspension in water
PARTITION COEFFICIENT (n-octanol/water): NA
AUTO-IGNITION TEMPERATURE: ND
DECOMPOSITION TEMPERATURE: ND
VISCOSITY: NA

NOTE TO PHYSICIAN: The compound does not cause any definite symptoms that would be diagnostic. No specific antidote. Treat symptomatically.
10. Stability & Reactivity:

**REACTIVITY:** ND

**STABILITY:** The product is stable under normal storage conditions.

**HAZARDOUS REACTIONS:** Polymerization will not occur

**CONDITIONS TO AVOID:** ND

**INCOMPATIBLE MATERIALS:** None in designed use.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides and possibly hydrochloric acid.

11. Toxicological Information:

**Toxicological Data for Repair Weed and Feed:**

**ROUTES OF EXPOSURE:**

**INHALATION:** Overexposure to dust may cause transitory lung and upper respiratory irritation, burning and coughing.

**SKIN:** Skin contact in hot, humid weather can cause irritation and rash.

**EYE CONTACT:** Dusts may cause irritation and rash.

**INGESTION:** Harmful if swallowed, may irritate and/or damage the G.I. system.

Specific target organ toxicity (STOT): N/A

**STOT-single exposure:** ND

**STOT-repeated exposure:** ND

**Aspiration hazard:** ND

**ADVERSE EFFECTS AND SYMPTOMS:** ND

**HAZARDOUS REACTIONS:** Overexposure to dust may cause transitory lung and upper respiratory irritation, burning and coughing.

**SPECIFIC TOXICITY:**

**INHALATION:** Inhalation 4h LC50 (rat): 9.6 mg/l

**SKIN:** Skin irritation (rabbit): Slightly irritating

**SKIN SENSITIZATION:** Guinea pig: Not a sensitizer

**EYE:** Eye irritation (rabbit): Moderately irritating

**MUTAGENICITY:** Non-mutagenic

**CARCINOGENICITY:** Not a carcinogen.

**REPRODUCTIVE TOXICITY:** Does not show any developmental toxicity.

**Toxicological Data for CFM Technical:**

**Oral LD50:** >5,000 mg/kg bw

**Dermal LD50 (rabbit):** >5,000 mg/kg bw

**Inhalation LD50 (rat):** >5.07 mg/L

**Skin irritation (rabbit):** Slightly irritating

**Skin sensitization:** Guinea pig: Not a sensitizer

**Eye irritation (rabbit):** Minimal irritation

**Mutagenicity:** Non-mutagenic

**Carcinogenicity:** Not a carcinogen.

**Reproductive Toxicity:** Does not show any developmental toxicity.

**Toxicological Data for Dicamba Technical:**

**Oral LD50 (rat):** >1707 mg/kg bw

**Dermal LD50 (rabbit):** >2000 mg/kg bw

**Inhalation 4h LD50 (rat):** 9.6 mg/l

**Skin irritation (rabbit):** Slight irritant

**Skin sensitization:** Non skin sensitizer

**Eye irritation (rabbit):** Moderate Irritant

**Mutagenicity:** No evidence of mutagenic affects

**Carcinogenicity:** Not listed as carcinogenic.

**Reproductive Toxicity:** ND

12. Ecological Information:

**Ecological Data for CFM Technical:**

**LC50 (96 h):** Bluegill sunfish 7.45 mg/L

**EC50 (48 h):** Daphnia magna 22.4 mg/L

**LC50 (96 h):** Rainbow trout 5.91 ml/kg

**PERFORMANCE AND DEGRADABILITY:** 99% of CFM is gone from soil after application. Hydrolyzes readily and rapidly under basic conditions.

**BIOACUMULATIVE POTENTIAL:** ND

**MOBILITY IN SOIL:** Movement of CFM in soil is slight while degradation product is very mobile.

**Ecological Data for Dicamba Technical:**

**96 h LC50:** Rainbow trout 135 ppm

**96 h LC50:** Bluegill sunfish 135 ppm

**48 h LC50:** Daphnia 110 mg/L

**8 day LD50:** Bobwhite quail >10000 mg/kg diet

**8 day LD50:** Mallard ducks >10000 mg/kg diet

**LD50:** Honey bee >100µg/bee

**PERFORMANCE AND DEGRADABILITY:** ND

**BIOACUMULATIVE POTENTIAL:** ND

**MOBILITY IN SOIL:** ND

13. Disposal Considerations:

**PESTICIDE DISPOSAL:** Do not contaminate water, food, or feed by disposal. Open dumping is prohibited. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixtures 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:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned stay out of smoke.

14. Transport Information:

**SHIPPING DESCRIPTION:** Not regulated by USDOT (Ground transport)

**DOT HAZARD CLASS:** N/A

**IDENTIFICATION NUMBER:** N/A

**DOT PACKING GROUP:** N/A

15. Regulatory Information:

This chemical is a pesticide product registered with the U.S. 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 as required on the pesticide label:

**CAUTION**: Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing.

16. Other Information:

<table>
<thead>
<tr>
<th>HMIS HAZARD RATING</th>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4=Severe</td>
<td>3=Serious</td>
<td>2=Moderate</td>
<td>1=Slight</td>
</tr>
</tbody>
</table>

**DISCLAIMER:** The information presented herein is based on available data from reliable sources and is correct to the best of Repar’s knowledge. Repar makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling.

It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

**REVISED DATE:** August 23, 2016

**REFERENCE:** Revised for GHS compliance