

Safety Data Sheet

Issue Date: 20-Dec-2017

Revision Date: 20-Dec-2017

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Gharda Dicamba Technical Herbicide

Other means of identification

SDS # GCI-002

Registration Number(s) EPA Reg. No. 93182-1

UNID No UN3077

Recommended use of the chemical and restrictions on use

Recommended Use EPA registered herbicide. Solid technical concentrate. For manufacture use in agriculture weed control products. Refer to product label for further details.

Details of the supplier of the safety data sheet

Manufacturer Address

GHARDA CHEMICALS INTERNATIONAL INC.
760 Newtown-Yardley Road
Suite 110
Newtown, PA USA 18940
Website: www.ghardausa.com
For further information contact: 1 (215) 968-9474

Emergency Telephone Number

Emergency Telephone (24 hr) MEDICAL EMERGENCY (24 hr): PROPHARMA (866)-359-5660
TRANSPORTATION OR SPILL (24 hr): CHEMTREC (800) 424-9300

2. HAZARDS IDENTIFICATION

This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information.

Appearance Colorless to buff crystalline solid

Physical state Solid

Classification

| | |
|-----------------------------------|------------|
| Acute toxicity - Oral | Category 4 |
| Serious eye damage/eye irritation | Category 1 |
| Combustible Dust | |

Signal Word

Danger

Hazard statements

Harmful if swallowed
Causes serious eye damage
May form combustible dust concentrations in air

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Wear eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTER or doctor
 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
 Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight-% |
|---------------|-----------|----------|
| Dicamba | 1918-00-9 | >97% |

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First Aid Measures

| | |
|-----------------------|--|
| General Advice | Provide this SDS to medical personnel for treatment. |
| Eye Contact | Rinse opened eye for several minutes under running water. Seek medical attention. |
| Skin Contact | Take off immediately all contaminated clothing. Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor. |
| Inhalation | Supply fresh air or oxygen; call for doctor. In case of unconsciousness place patient stably in side position for transportation. |
| Ingestion | Do NOT induce vomiting. Seek medical attention immediately. Rinse mouth and drink plenty of water. |

Most important symptoms and effects

Symptoms Causes serious eye damage. Harmful if swallowed.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. Keep under medical supervision for at least 48 hours.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray (fog). Foam.

Unsuitable Extinguishing Media Water with a full water jet. Carbon dioxide (CO₂). Extinguishing powder.

Specific Hazards Arising from the Chemical

Dust can form an explosive mixture with air.

Hazardous Combustion Products Carbon monoxide. Nitrogen oxides (NO_x). Under certain fire conditions, traces of other toxic gases cannot be excluded.

Explosion Data

Sensitivity to Static Discharge AVOID GENERATING DUST. Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Collect contaminated fire extinguishing water separately. Do not allow it to enter drains or surface water. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Avoid contact with spilled product or contaminated areas. Avoid contact with skin, eyes or clothing. Keep unprotected persons away. Wear protective clothing as described in Section 8 of this safety data sheet. Refer to Section 7, Handling, for additional precautionary measures.

Environmental precautions

Environmental precautions

Do not allow product to reach sewage system or any water course. See Section 12 for additional Ecological Information. Inform respective authorities in case of seepage into water course or sewage system.

Methods and material for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up

Carefully sweep, scoop or vacuum and place in suitable container. Avoid generating dust or accumulating dust. Avoid dust dispersal in the air (i.e. cleaning dust surfaces with compressed air). If possible, complete cleanup on a dry basis. Spilled material can be a slipping hazard. Eliminate flames, sparks, excessive temperatures and oxidizing agents. Non-sparking tools should be used. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Use personal protection recommended in Section 8. Do not eat, drink or smoke when using this product. Avoid generation of dust. Avoid breathing dusts. Avoid contact with skin, eyes or clothing. Minimize dust generation and accumulation. Ensure that dust does not accumulate on surfaces.

Conditions for safe storage, including any incompatibilities

| | |
|-------------------------------|--|
| Storage Conditions | Store in closed, properly labeled containers in a cool, ventilated area. Do not transfer contents to bottles or other unlabeled containers. Keep away from heat, open flames and oxidizing agents. |
| Incompatible Materials | Oxidizing agents. Acids. Bases. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. The following information is given as general guidance.

Appropriate engineering controls

Engineering Controls Explosion-proof general and local exhaust ventilation. Use explosion proof electrical equipment for very high dust levels. Ensure ventilation and dust-handling systems prevent the escape of dust into work areas and there is no leakage from equipment.

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------------|---|
| Eye/Face Protection | Tightly sealed goggles. |
| Skin and Body Protection | Protective gloves. The glove material has to be impermeable and resistant to the product/the substance/the preparation. Suitable protective clothing. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. |
| Respiratory Protection | Nuisance dust mask 3M type 8710 or equivalent. |
| General Hygiene Considerations | Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. |

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|------------------------------|-------------------------------------|-------------------------|----------------|
| Physical state | Solid | Odor | Not determined |
| Appearance | Colorless to buff crystalline solid | Odor Threshold | Not determined |
| Color | Colorless to buff | | |
| Property | Values | Remarks • Method | |
| pH | Not determined | | |
| Melting Point/Freezing Point | 114-116°C/237-240°F | | |
| Boiling Point/Boiling Range | Not determined | | |
| Flash Point | >100°C/212°F | | |
| Evaporation Rate | Not determined | | |
| Flammability (Solid, Gas) | Not determined | | |
| Flammability Limits in Air | | | |
| Upper Flammability Limits | Not determined | | |
| Lower Flammability Limit | Not determined | | |
| Vapor Pressure | Not determined | | |
| Vapor Density | Not determined | | |
| Relative Density | Not determined | | |
| Water Solubility | 6.1 g/l | | |

| | |
|-------------------------------------|---|
| Solubility in other solvents | In ethanol 922, cyclohexanone 916, acetone 810, dichloromethane 260, dioxane 1180, toluene 130, xylene 78 (all in g/l, 25 °C) |
| Partition Coefficient | Not determined |
| Auto-ignition Temperature | Not determined |
| Decomposition Temperature | >200°C / 392°F |
| Kinematic Viscosity | Not determined |
| Dynamic Viscosity | Not determined |
| Explosive Properties | Dust can form an explosive mixture with air |
| Oxidizing Properties | Not determined |
| Other Information | |
| Density | 1.5 -1.6 g/cm ³ |

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Dust can form an explosive mixture with air.

Conditions to Avoid

Heat, flames and sparks. Thermal decomposition: 200 °C.

Incompatible Materials

Oxidizing agents. Acids. Bases.

Hazardous Decomposition Products

Decomposition will not occur if handled and stored properly.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

| | |
|---------------------|----------------------------|
| Eye Contact | Causes serious eye damage. |
| Skin Contact | Avoid contact with skin. |
| Inhalation | Do not inhale. |
| Ingestion | Harmful if swallowed. |

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------------|----------------------|--------------------------------------|-----------------|
| Dicamba 1918-00-9 | = 1039 mg/kg (Rat) | > 1 g/kg (Rat) > 2 g/kg (Rabbit) | - |

Information on physical, chemical and toxicological effects

| | |
|-----------------|--|
| Symptoms | Please see section 4 of this SDS for symptoms. |
|-----------------|--|

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 1,039.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Persistence/Degradability

In soil, microbial degradation occurs, the principal metabolite being 3,6-dichlorosalicylic acid. Under conditions amenable to rapid metabolism, DT50 <14 d. Koc 2.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations. Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN3077
Proper Shipping Name Environmentally Hazardous Substance, Solid, N.O.S. (Dicamba)
Hazard Class 9
Packing Group III
Marine Pollutant Yes.

IATA

UN/ID No UN3077
Proper Shipping Name Environmentally Hazardous Substance, Solid, N.O.S. (Dicamba)
Hazard Class 9
Packing Group III
Marine Pollutant Yes

IMDG

| | |
|-----------------------------|--|
| UN/ID No | UN3077 |
| Proper Shipping Name | Environmentally Hazardous Substance, Solid, N.O.S. (Dicamba) |
| Hazard Class | 9 |
| Packing Group | III |
| Marine Pollutant | Yes |

15. REGULATORY INFORMATION

International Inventories

| Chemical Name | TSCA | DSL/NDSL | EINECS/E LINCS | ENCS | IECSC | KECL | PICCS | AICS |
|---------------|------|----------|----------------|---------|-------|---------|-------|------|
| Dicamba | X | | X | Present | | Present | X | X |

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|----------------------|--------------------------|----------------|---|
| Dicamba 1918-00-9 | 1000 lb | | RQ 1000 lb final RQ RQ 454 kg final RQ |

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name | CAS No. | Weight-% | SARA 313 - Threshold Values % |
|---------------------|-----------|----------|-------------------------------|
| Dicamba - 1918-00-9 | 1918-00-9 | >97% | 1.0 |

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Dicamba | 1000 lb | | | X |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|----------------------|------------|---------------|--------------|
| Dicamba 1918-00-9 | X | X | X |

EPA Pesticide Registration Number EPA Reg. No. 93182-1

EPA Statement

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 as required on the pesticide label:

EPA Pesticide Label

SIGNAL WORD: DANGER

Corrosive. Causes irreversible eye damage. Harmful if swallowed, absorbed through skin or inhaled. Do not get in eyes, on skin, or on clothing. Avoid breathing dust. Avoid contact with skin. Wear protective eyewear (goggles or face shield). Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Difference between SDS and EPA pesticide label

| | EPA | OSHA |
|-----------------------------------|--------------------------------------|---------------------------|
| Signal Word | Danger | Danger |
| Acute toxicity - Oral | Harmful if swallowed | Harmful if swallowed |
| Acute toxicity - Inhalation | Harmful if inhaled | NA |
| Acute toxicity - Dermal | Harmful if absorbed through the skin | NA |
| Serious eye damage/eye irritation | Causes irreversible eye damage | Causes serious eye damage |

16. OTHER INFORMATION

| | | | | |
|--------------------|----------------------------|--------------------------|------------------------------|--|
| <u>NFPA</u> | Health Hazards 2 | Flammability 0 | Instability 0 | Special Hazards Not determined |
| <u>HMIS</u> | Health Hazards 2 | Flammability 0 | Physical hazards 0 | Personal Protection Not determined |

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 Revision Note: New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet