SAFETY DATA SHEET

Revision date 27-Jul-2021



Revision Number 1

| 1. Identification | | |
|---|---------------------------|--|
| Product identifier | | |
| Product Name | HAMMERDOWN | |
| Other means of identification | | |
| Product Code(s) | 000104 | |
| UN/ID no. | UN3082 | |
| Synonyms | None | |
| Registration Number(s) | 89442-22 | |
| Recommended use of the chemica | l and restrictions on use | |
| Recommended use | Herbicide | |
| Restrictions on use | Follow label instructions | |
| Details of the supplier of the safety data sheet | | |
| <u>Company Address</u> PrimeSource, A Division of Albaugh L 1525 NE 36th St Ankeny, IA 50211 | LC. | |
| Emergency telephone number | | |

Company Phone Number 1-800-247-8013

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night

- Within USA and Canada: 1-800-424-9300
- Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

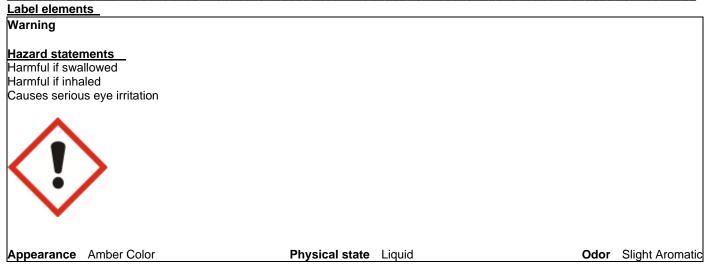
2. Hazard(s) identification

Classification

| Acute toxicity - Oral | Category 4 |
|---|-------------|
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
| Serious eye damage/eye irritation | Category 2A |

Hazards not otherwise classified (HNOC)

Not applicable



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area 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 If eye irritation persists: Get medical advice/attention IF INHALED: Remove person to fresh air and keep comfortable for breathing Call a POISON CENTER or doctor if you feel unwell 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 information

Causes mild skin irritation. Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

| Chemical name | CAS No | Weight-% | Active Ingredient |
|-------------------------------|-------------|--------------|-------------------|
| Dimethylamine salt of 2,4-D | 2008-39-1 | 29 .96-31.82 | Х |
| Dimethylamine salt of MCPA | 2039-46-5 | 7.82-8.64 | Х |
| Dimethylamine salt of Dicamba | 2300-66-5 | 2.63-2.91 | Х |
| Castor oil, ethoxylated | 61791-12-6 | 1.50-2.50 | |
| Other Ingredients | PROPRIETARY | >50.00 | |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

| General advice | Show this safety data sheet to the doctor in attendance. | | |
|--|---|--|--|
| Inhalation | Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately. | | |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists. | | |
| Skin contact | Wash skin with soap and water. | | |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention. | | |
| Self-protection of the first aider | Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information. | | |
| Most important symptoms and effe | cts, both acute and delayed | | |
| Symptoms | May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may cause redness and irritation. Coughing and/ or wheezing. Difficulty in breathing. | | |
| Indication of any immediate medical attention and special treatment needed | | | |
| Note to physicians | Treat symptomatically. | | |
| | | | |

5. Fire-fighting measures

| Suitable Extinguishing Media Large Fire | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. CAUTION: Use of water spray when fighting fire may be inefficient. |
|---|---|
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | No data available. |
| Explosion data Sensitivity to mechanical impac | et None. |
| Sensitivity to static discharge | None. |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Avoid breathing vapors or mists.

| Other information | Refer to protective measures listed in Sections 7 and 8. | | |
|--------------------------------|--|--|--|
| Methods and material for conta | inment and cleaning up | | |
| Methods for containment | Prevent further leakage or spillage if safe to do so. | | |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. | | |

7. Handling and storage

Precautions for safe handling

| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Avoid breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. | | |
|--|---|--|--|
| Conditions for safe storage, including any incompatibilities | | | |
| Storage Conditions | Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach | | |

8. Exposure controls/personal protection

of children.

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

| Appropriate engineering controls | | | |
|-------------------------------------|---|--|--|
| Engineering controls | Showers Eyewash stations Ventilation systems. | | |
| Individual protection measures, suc | ch as personal protective equipment | | |
| Eye/face protection | Wear safety glasses with side shields (or goggles). | | |
| Hand protection | Wear suitable gloves. | | |
| Skin and body protection | Wear suitable protective clothing. | | |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are | | |

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

9. Physical and chemical properties

| Information on basic physical and chemical properties | | | | | |
|---|--|---------------------------------|--|--|--|
| Physical state | Liquid | | | | |
| Appearance | Amber Color | | | | |
| Color | Amber | | | | |
| Odor | Slight Aromatic | | | | |
| Odor threshold | Not applicable | | | | |
| | | | | | |
| Property | Values | Remarks • Method | | | |
| pH | 6 - 8 | @ 25 °C | | | |
| Melting point / freezing point | Not Applicable (mixture) °C / °F | | | | |
| Boiling point / boiling range | Not Applicable (mixture) °C / °F | | | | |
| Flash point | No data available °C / °F | (based on components) | | | |
| Evaporation rate | Not Applicable (aqueous mixture) | | | | |
| Flammability (solid, gas) | Not Applicable (aqueous mixture) | | | | |
| Flammability Limit in Air | | | | | |
| Upper flammability or explosive | Not Applicable (aqueous mixture) | | | | |
| limits | | | | | |
| Lower flammability or explosive | No data available | | | | |
| limits | | | | | |
| Vapor pressure | Not Applicable (mixture) | | | | |
| Vapor density | Not Applicable (mixture) | | | | |
| Relative density | 1.10 - 1.12 | @ 25 °C | | | |
| Water solubility | Soluble in water | (Based on component solubility) | | | |
| Solubility(ies) | Soluble in water | | | | |
| Partition coefficient | Not applicable (mixture) | | | | |
| Autoignition temperature | Not Applicable (aqueous mixture) °C / °F | | | | |
| Decomposition temperature | / г Not Applicable (mixture) - °C °F | | | | |
| Kinematic viscosity | $9.9 @ 20C 4.8 @ 40 C mm^2/s$ | | | | |
| Dynamic viscosity | No data available | | | | |
| Dynamic viscosity | NO Gata available | | | | |
| Other information | | | | | |
| Explosive properties | No data available | | | | |
| Oxidizing properties | No data available | | | | |
| Softening point | Not applicable (aqueous mixture) | | | | |
| Molecular weight | Not applicable (mixture) | | | | |
| VOC Content (%) | | | | | |
| Liquid Density | No data available | | | | |
| Bulk density | 9.1 - 9.3 lbs / gallon | | | | |
| | d does not necessarily represent that of a spe | ecific batch | | | |
| · ·· | | | | | |

10. Stability and reactivity

| Reactivity | No data available. |
|------------------------------------|---|
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | Excessive heat. |
| Incompatible materials | None known based on information supplied. |

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

| oduct Information | |
|-------------------|--|
| Inhalation | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Harmful by inhalation. (based on components). |
| Eye contact | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain. |
| Skin contact | Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation. Causes mild skin irritation. |
| Ingestion | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components). |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation. Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

Acute results from similar formulation.

| Oral LD50 Dermal LD50 Inhalation LC50 Component Information | 1,030 mg/kg > 5,000 mg/kg > 2.10 mg/l | | |
|--|---|---|-----------------|
| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
| Dimethylamine salt of 2,4-D 2008-39-1 | = 625 mg/kg (Rat) | = 2115 mg/kg (Rabbit) | - |
| Dimethylamine salt of Dicamba 2300-66-5 | = 1267 mg/kg (Rat) = 2629 mg/kg (Rat) | > 2000 mg/kg (Rabbit)> 2 g/kg (Rabbit) | - |

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

| Skin corrosion/irritation | Slightly irritating to the skin. |
|-----------------------------------|--|
| Serious eye damage/eye irritation | Classification based on data available for ingredients. Causes serious eye irritation. |
| Respiratory or skin sensitization | Did not cause sensitization on laboratory animals. |
| Germ cell mutagenicity | No data available. |
| Carcinogenicity | No data available. |
| Reproductive toxicity | No data available. |
| STOT - single exposure | No data available. |

| STOT - repeated exposure | No data available. |
|--------------------------|--------------------|
| Aspiration hazard | No data available. |
| Other adverse effects | None expected. |
| Interactive effects | None expected. |

12. Ecological information

Ecotoxicity

Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|--|----------------------|--|-------------------------------|-----------|
| Dimethylamine salt of 2,4-D 2008-39-1 | - | LC50: =326mg/L (96h, Cyprinus carpio) | - | - |
| Castor oil, ethoxylated 61791-12-6 | - | LC50: >45mg/L (96h, Danio rerio) | - | - |
| Persistence and degradability Degrades rapidly in the environment. | | | | |
| Bioaccumulation | There is no d | ata for this product. | | |

Other adverse effects No data available.

| 13. Disposal considerations | | | |
|--|---|--|--|
| Waste treatment methods | | | |
| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. | | |
| Contaminated packaging | Do not reuse empty containers. | | |
| US EPA Waste Number | U092 U240 U404 | | |

14. Transport information

| <u>DOT</u> | Not regulated |
|-------------------------------|---|
| Notes | Containers > 42 gallons - UN3082, Environmentally Hazardous Substances, Liquid, |
| | N.O.S. (2,4-D), 9, PG III, RQ (2,4-D acid) |
| UN/ID no. | UN3082 |
| Transport hazard class(es) | 9 |
| Packing group | |
| DOT reportable quantity - Ibs | 100 lbs 2,4-D acid (42 gallons of product) |

| 15. Regulatory information | |
|----------------------------|--|
| U.S. EPA Label Information | |

EPA Pesticide Registration Number 89442-22

EPA Pesticide Label

WARNING. Causes substantial, but temporary eye injury. Causes skin irritation. Harmful if

swallowed.

International Inventories

| TSCA | Does not comply |
|---------------|-----------------|
| DSL/NDSL | Does not comply |
| EINECS/ELINCS | Does not comply |
| ENCS | Does not comply |
| IECSC | Does not comply |
| KECL | Does not comply |
| PICCS | Does not comply |
| AICS | Does not comply |

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

<u>SARA 313</u>

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 | SARA 313 - Threshold Values % | | |
|---|-------------------------------|--|--|
| Dimethylamine salt of Dicamba - 2300-66-5 | 1.0 | | |

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

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 | Extremely Hazardous Substances RQs |
|-----------------------------|--------------------------|------------------------------------|
| Dimethylamine salt of 2,4-D | 100 lb | - |
| 2008-39-1 | | |

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 |
|---------------|------------|---------------|--------------|
| Water | - | - | Х |
| 7732-18-5 | | | |

000104 - HAMMERDOWN

| Dimethylamine salt of Di 2300-66-5 | camba | X | - | | - |
|---|---|---|---|------------------------------------|---|
| | | | | | |
| 16. Other information | tion | | | | |
| NFPA | Health hazards 3 | Flammability (| lnstabilit | y 0 | Physical and chemical properties - |
| HMIS Chronic Hazard Star Legend | Health hazards 3 * | Flammability (C Health Hazard | Physical | hazards 0 | Personal protection X |
| Key or legend to abbrev Legend Section 8: EXF | viations and acronyms POSURE CONTROLS/F | used in the safety PERSONAL PROTE | <u>data sheet</u> CTION | | |
| TWA TWA | (time-weighted average num limit value | | EL ST | EL (Short Term n designation | n Exposure Limit) |
| Agency for Toxic Substar U.S. Environmental Prote European Food Safety Au EPA (Environmental Prote Acute Exposure Guideline U.S. Environmental Prote U.S. Environmental Prote Food Research Journal Hazardous Substance Da International Uniform Che Japan GHS Classification Australia National Industr NIOSH (National Industr NIOSH (National Institute National Library of Medici National Library of Medici National Toxicology Prog New Zealand's Chemical Organization for Economi Organization for Economi World Health Organizatio | ection Agency ChemView uthority (EFSA) ection Agency) e Level(s) (AEGL(s)) ection Agency Federal In ection Agency High Prod atabase emical Information Datal n rial Chemicals Notification for Occupational Safety ine's ChemID Plus (NLN ine's PubMed database ram (NTP) Classification and Inform ic Co-operation and Devi ic Co-operation and Devi in Co-operation and Devi | w Database secticide, Fungicide luction Volume Chen base (IUCLID) on and Assessment S / and Health) 4 CIP) (NLM PUBMED) mation Database (CO /elopment Environme/ /elopment High Prod /elopment Screening | nicals Scheme (NICNAS) CID) ent, Health, and Sa uction Volume Che | fety Publicatior micals Prograr | |
| | The information given | vailable. Sheet is correct to t is designed only as | a guidance for sa | afe handling, ι | mation and belief at the use, processing, storage, |

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.

DISCLAIMER: The information presented herein is based on available data from reliable sources and is correct to the best of Albaugh's knowledge. Albaugh 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.

End of Safety Data Sheet