



1. Identification

Product identifier

Product Name Medusa

Other means of identification

Product Code(s) 42750-328

UN/ID no. UN3082

Synonyms None

Registration Number(s) 42750-328-94396

Recommended use of the chemical and restrictions on use

Recommended use Herbicide

Restrictions on use Follow label instructions

Details of the supplier of the safety data sheet

Company

Aquatrols Corporation of America 1273 Imperial Way
Paulsboro, NJ 08066

Website

www.aquatrols.com

Phone number

(856) 537-6003

Email

jyichye@aquatrols.com

Emergency telephone number

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

- Within USA and Canada: 1-800-424-9300 CCN771
- 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 Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide.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 - Inhalation (Dusts/Mists)	Category 4***
Serious eye damage/eye irritation	Category 2B***

Hazards not otherwise classified (HNOC)
Not applicable

Label elements

Warning***

Hazard statements
Harmful if inhaled
Causes eye irritation***



Appearance No information available **Physical state** Liquid **Odor** Pungent

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling***

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***

Other information

May be harmful if swallowed. Causes mild skin irritation. Harmful to aquatic life with long lasting effects.***

3. Composition/information on ingredients

Substance

Not applicable.***

Mixture ***

Chemical name	CAS No	Weight-%	Trade secret	Active Ingredient
Dimethylamine salt of 2,4-D	2008-39-1	12.5-14.0	*	
Dimethylamine salt of quinclorac	84087-01-4	9.5-10.5	*	

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Crystal Inihibitor	61791-12-6	2.5	*	
Dimethylamine salt of Dicamba	2300-66-5	1.5-2.0	*	

*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. Keep eye wide open while rinsing. Get medical attention if irritation develops and persists. Remove contact lenses, if present and easy to do. Continue rinsing.***
Skin contact	Wash skin with soap and water.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention.***
Self-protection of the first aider	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 effects, both acute and delayed

Symptoms	Prolonged contact may cause redness and irritation. Coughing and/ or wheezing. Difficulty in breathing.***
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	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 information available.
Explosion data	
Sensitivity to mechanical impact	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 containment 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 breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product.***

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 of children.***

8. Exposure controls/personal protection

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, such as personal protective equipment

Eye/face protection None required for consumer use. 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. 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 No information available
Color Amber; clear
Odor Pungent
Odor threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6.9 -*** 7.9	@ 20 °C
Melting point / freezing point	Not required °C*** /*** Not required °F***	None known
Boiling point / boiling range	Not required °C*** /*** Not required °F***	None known
Flash point	Not required °C*** /*** °F***	None known
Evaporation rate	Not required	None known
Flammability (solid, gas)	Not required	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	Not required	
Lower flammability or explosive limits	No data available	
Vapor pressure	Not required	None known
Vapor density	Not required	None known
Relative density	2.20 1.12	Not applicable
Water solubility	No data available Soluble	None known
Solubility(ies)	No data available	None known
Partition coefficient	Not required	None known
Autoignition temperature	Not required °C*** /*** °F***	None known
Decomposition temperature	Not required -*** °C*** °F***	None known
Kinematic viscosity	9.9 mm ² /s	@ 20 °C
Dynamic viscosity	No data available	None known

Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity	No information 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

Product Information	.***
Inhalation	Specific test data for the substance or mixture is not available. Harmful by inhalation. (based on components).***
Eye contact	Specific test data for the substance or mixture is not available. Causes eye irritation. May cause redness, itching, and pain.***
Skin contact	Specific test data for the substance or mixture is not available. Causes mild skin irritation.***
Ingestion	May be harmful if swallowed.***

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.***
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Acute toxicity

Numerical measures of toxicity

3,129 mg/kg > 5,000 mg/kg > 2.09 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Dimethylamine salt of 2,4-D	= 625 mg/kg (Rat)	= 2115 mg/kg (Rabbit)	-

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2008-39-1			
Dimethylamine salt of quinclorac 84087-01-4	= 2190 mg/kg (Rat)	> 2 g/kg (Rat)	-
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	May cause skin irritation. Classification based on data available for ingredients.***
Serious eye damage/eye irritation	Classification based on data available for ingredients. Irritating to eyes.***
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Other adverse effects	No information available.
Interactive effects	No information available.

12. Ecological information

Ecotoxicity Harmful 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)	-	-
Crystal Inhibitor 61791-12-6	-	LC50: >45mg/L (96h, Danio rerio)	-	-

Persistence and degradability	No information available.
Bioaccumulation	There is no data for this product.

Other adverse effects	No information available.
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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	U240

14. Transport information

DOT	Not regulated
UN/ID no.	UN3082
Hazard class	Environmentally Hazardous Substances
Subsidiary class	9
Packing group	III
DOT reportable quantity - lbs	> 47 gallons
TDG	Not regulated
MEX	Not regulated
ICAO (air)	Not regulated
IATA	Not regulated
IMDG	Not regulated
RID	Not regulated
ADR	Not regulated
ADN	Not regulated

15. Regulatory information

International Inventories

TSCA Contact supplier for inventory compliance status.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA active/inactive designation
Water	7732-18-5	Present	Active
Dimethylamine salt of 2,4-D	2008-39-1		
Dimethylamine salt of quinclorac	84087-01-4		
Propylene Glycol	57-55-6	Present	Active
Crystal Inhibitor	61791-12-6	Present	Active
Dimethylamine salt of Dicamba	2300-66-5		

*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements***

DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.



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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

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	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 2008-39-1	100 lb	-

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 7732-18-5	-	-	X
Propylene Glycol 57-55-6	X	-	X
Dimethylamine salt of Dicamba 2300-66-5	X	-	-

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

<u>NFPA</u>	Health hazards 3	Flammability 0	Instability 0	Physical and chemical properties -
<u>HMIS</u>	Health hazards 3	Flammability 0	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

- Agency for Toxic Substances and Disease Registry (ATSDR)
- U.S. Environmental Protection Agency ChemView Database
- European Food Safety Authority (EFSA)
- EPA (Environmental Protection Agency)
- Acute Exposure Guideline Level(s) (AEGL(s))
- U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
- U.S. Environmental Protection Agency High Production Volume Chemicals
- Food Research Journal
- Hazardous Substance Database
- International Uniform Chemical Information Database (IUCLID)
- Japan GHS Classification
- Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
- NIOSH (National Institute for Occupational Safety and Health)
- National Library of Medicine's ChemID Plus (NLM CIP)
- National Library of Medicine's PubMed database (NLM PUBMED)
- National Toxicology Program (NTP)
- New Zealand's Chemical Classification and Information Database (CCID)
- Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
- Organization for Economic Co-operation and Development High Production Volume Chemicals Program
- Organization for Economic Co-operation and Development Screening Information Data Set
- World Health Organization

Revision date 07-Jul-2020
Revision Note No information available.

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

United States of America

US SDS version information - AGHS

UL release date: 20 March 2020
GHS Revision 3

United States of America

Full process, including GHS and Transportation Wizards***



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Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Dimethylamine salt of 2,4-D 2008-39-1	U240	-	-	U240

Label elements

pH - VALUE 1	6.9
Value	3,129
Kinematic viscosity - VALUE 1	9.9
Physical state	Liquid
Flash point °C - VALUE 1	Not required
Boiling point / boiling range °C - VALUE 1	Not required
Burning rate - VALUE 1	Not required
Acute toxicity - Oral	Category 5
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Skin corrosion	Not classified
Skin corrosion/irritation	Category 3
Serious eye damage/eye irritation	Category 2B
Skin sensitization	Not classified

Globally Harmonized System (GHS)		Europe	Japan	China
STOT SE 1 target organ(s)	No information available	No information available	No information available	No information available
STOT SE 2 target organ(s)	No information available	No information available	No information available	No information available
STOT SE 3 target organ(s)	No information available	No information available	No information available	No information available
STOT RE 1 target organ(s)	No information available	No information available	No information available	No information available
STOT RE 2 target organ(s)	No information available	No information available	No information available	No information available

Oral - Rat, Single Exposure	3,129
Dermal - Rat or Rabbit - Single Exposure	>5,000
Inhalation - Rat - Gas - Single Exposure	>2.09
Inhalation - Rat - Vapor - Single Exposure	>2.09