



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
 Product name : BANVEL® 480SC Herbicide
 Other means of identification : EPA Reg. No. 66330-421

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Herbicide.

1.3. Details of the supplier of the safety data sheet

Arysta LifeScience North America LLC
 15401 Weston Parkway, Suite 150
 Cary, NC 27513 - USA

1.4. Emergency telephone number

Emergency number : Exposure Calls (PROSAR): +1-866-303-6952 or +1-651-603-3432 (international)
 Spill Calls (CHEMTREC) (Contract # CCN1779): +1-800-424-9300 or +1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Eye Irrit. 2B H320
 Skin Sens. 1 H317
 Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning
 Hazard statements (GHS-US) : H317 - May cause an allergic skin reaction
 H320 - Causes eye irritation
 Precautionary statements (GHS-US) : P261 - Avoid breathing mist, vapours
 P264 - Wash hands thoroughly after handling
 P272 - Contaminated work clothing must not be allowed out of the workplace
 P280 - Wear eye protection, protective gloves
 P302+P352 - If on skin: Wash with plenty of water
 P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P321 - Specific treatment (see First aid measures on this label)
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
 P337+P313 - If eye irritation persists: Get medical advice/attention
 P362+P364 - Take off contaminated clothing and wash it before reuse
 P501 - Dispose of contents/container to an authorised waste collection point

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

0.6 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
 0.6 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
 0.6 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Dicamba Dimethylamine Salt	(CAS No) 2300-66-2	49.77	Eye Irrit. 2B, H320

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : If inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. . Get medical advice/attention.
- First-aid measures after skin contact : Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Do not give any liquid to the person. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : In high concentrations : Inhalation may cause: irritation, coughing, shortness of breath.
- Symptoms/injuries after skin contact : May cause an allergic skin reaction. May cause moderate irritation.
- Symptoms/injuries after eye contact : Causes eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Dry chemical. Foam. Water spray.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : No particular fire or explosion hazard. Burning produces irritating, toxic and noxious fumes.
- Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

- Firefighting instructions : Do not allow run-off from fire fighting to enter drains or water courses. Exercise caution when fighting any chemical fire.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear a self contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all eye and skin contact and do not breathe vapour and mist.

6.1.1. For non-emergency personnel

- Protective equipment : Chemical goggles or safety glasses. protective gloves.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Chemical goggles or safety glasses. Protective gloves.
- Emergency procedures : Ventilate area. Stop leak if safe to do so.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Prevent dispersion.

6.3. Methods and material for containment and cleaning up

- For containment : Absorb and/or contain spill with inert material, then place in suitable container. Sweep or shovel into suitable containers.

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Methods for cleaning up : Following recovery, flush area with water. Clean surface thoroughly to remove residual contamination.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapours.
Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Do not store near food, foodstuffs, drugs, or potable water supplies. Keep container closed when not in use.

7.3. Specific end use(s)

Herbicide.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

BANVEL® 480SC Herbicide	
ACGIH	Not applicable
OSHA	Not applicable

Dicamba Dimethylamine Salt (2300-66-2)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Appropriate engineering controls : Avoid splashing. Either local exhaust or general room ventilation is usually required.
Personal protective equipment : Avoid all unnecessary exposure.
Hand protection : Wear water impervious gloves.
Eye protection : Chemical goggles or safety glasses.
Skin and body protection : Long sleeved protective clothing.
Respiratory protection : If needed, use an air-purifying respirator with organic vapor cartridges and a dust/mist prefilter.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : amber
Odour : mild;Amine-like
Odour threshold : No data available
pH : 7 - 8
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : 100 °C
Freezing point : No data available
Boiling point : 100 °C
Flash point : Does not flash
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : 18 mm Hg @ 20 °C
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : 1.16 g/cm³ 9.68 lb/gal
Solubility : Totally soluble in water in all proportions.

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Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Burning produces irritating, toxic and noxious fumes. Thermal decomposition generates : hydrogen chloride. Nitrogen oxides. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

BANVEL® 480SC Herbicide	
LD50 oral rat	2629 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.4 mg/l/4h

Skin corrosion/irritation	: Not classified (Slightly irritating to skin. Conclusive but not sufficient for classification)
Serious eye damage/irritation	: Causes eye irritation. (Irritating to rabbits on ocular application)
Respiratory or skin sensitisation	: May cause an allergic skin reaction. (Positive)
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: In high concentrations : Inhalation may cause: irritation, coughing, shortness of breath.
Symptoms/injuries after skin contact	: May cause an allergic skin reaction. May cause moderate irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Likely routes of exposure	: Inhalation;Skin and eye contact

SECTION 12: Ecological information

12.1. Toxicity

BANVEL® 480SC Herbicide	
LC50 fish 1	> 1000 mg/l 96 h Bluegill

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BANVEL® 480SC Herbicide	
EC50 Daphnia 1	1600 mg/l 48 h
LC50 fish 2	> 1000 mg/l 96 h Trout

Dicamba Dimethylamine Salt (2300-66-2)	
LC50 fish 1	135 mg/l 96-hr Oncorhynchus mykiss, Lepomis macrochirus
EC50 Daphnia 1	110 mg/l 48-hr

12.2. Persistence and degradability

Dicamba Dimethylamine Salt (2300-66-2)	
Biodegradation	Half life in soil 30-60 days

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

Dicamba Dimethylamine Salt (2300-66-2)	
Mobility in soil	Highly mobile

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Do not dispose in household garbage.
Sewage disposal recommendations	: Do not dispose of waste into sewer.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT

Not considered a dangerous good for transport regulations

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Dicamba Dimethylamine Salt (2300-66-2)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Dicamba Dimethylamine Salt (2300-66-2)
Not listed on the Canadian DSL (Domestic Substances List) inventory. Not listed on the Canadian Non-Domestic Substances List (NDSL).

EU-Regulations

Dicamba Dimethylamine Salt (2300-66-2)
Not listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Sens. 1 H317

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

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15.2.2. National regulations

No additional information available

15.3. US State regulations

No additional information available

15.4. US EPA – FIFRA Regulations

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

Signal word (FIFRA)	:	Caution
Hazard statements (FIFRA)	:	Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing.
Environmental hazards	:	DO NOT apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. DO NOT contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on label.
Physical or Chemical hazards	:	None.

SECTION 16: Other information

Indication of changes	:	Original Document.
Data sources	:	ACGIH (American Conference of Government Industrial Hygienists). European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database . Kristen Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. NIOSH Occupational Health Guide for chemical Substances - Vol. II, September, 1978. OSHA 29CFR 1910.1200 Hazard Communication Standard. TSCA Chemical Substance Inventory. Accessed at http://www.epa.gov/oppt/existingchemicals/pubs/tscaiinventory/howto.html .
Abbreviations and acronyms	:	ATE: Acute Toxicity Estimate. CAS (Chemical Abstracts Service) number. CFR: Code of Federal Regulations. CLP: Classification, Labelling, Packaging. EC50: Environmental Concentration associated with a response by 50% of the test population. GHS: Globally Harmonized System (of Classification and Labeling of Chemicals). LD50: Lethal Dose for 50% of the test population. OSHA: Occupational Safety & Health Administration. STEL: Short Term Exposure Limits. TSCA: Toxic Substances Control Act. TWA: Time Weight Average.
Other information	:	None.

Full text of H-phrases:

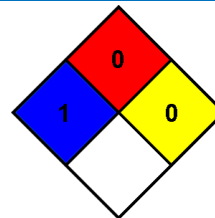
Eye Irrit. 2B	Serious eye damage/eye irritation, Category 2B
Skin Sens. 1	Sensitisation — Skin, category 1
H317	May cause an allergic skin reaction
H320	Causes eye irritation

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NFPA health hazard	: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard	: 0 - Materials that will not burn.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



SDS US (GHS HazCom 2012)

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product