

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : AMBRIVA

Other means of identification : BIXLOZONE 50% + METRIBUZIN 10% WG

Manufacturer or supplier's details

Company : FMC India Private Limited

Address : TCG Financial Centre, 2nd Floor, C-53,
Bandra Kurla Complex,
Bandra (E), Mumbai, Maharashtra-400098
India

E-mail address : SDS-Info@fmc.com

Emergency telephone : 022 6704 5504/5404
000-800-100-7141 (CHEMTREC)

Medical Emergency Number : 022 6704 5504/5404

Recommended use of the chemical and restrictions on use

Recommended use : Can be used for production of herbicides only.

Restrictions on use : Use as recommended by the label.

2. HAZARDS IDENTIFICATION

Manufacture, Storage and Import of Hazardous Chemicals Rules 1989

Classification

Not classified as hazardous according to criteria laid down in Part I of Schedule-1.

GHS Classification

Specific target organ toxicity - repeated exposure : Category 2 (Blood, Thyroid)

Short-term (acute) aquatic hazard : Category 2

Long-term (chronic) aquatic hazard : Category 1

GHS label elements

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version 1.0 Revision Date: 06.06.2024 SDS Number: 50002903 Date of last issue: -
Date of first issue: 06.06.2024

- Hazard pictograms :
- Signal Word : WARNING
- Hazard Statements : H373 May cause damage to organs (Blood, Thyroid) through prolonged or repeated exposure.
H401 Toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
- Precautionary Statements : **Prevention:**
P260 Do not breathe dust.
P273 Avoid release to the environment.
Response:
P319 Get medical help if you feel unwell.
P391 Collect spillage.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

May form explosible dust-air mixture if dispersed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Bixlozone	81777-95-9	>= 30 - < 60
metribuzin (ISO)	21087-64-9	>= 5 - < 15
Talc (Mg3H2(SiO3)4)	14807-96-6	>= 10 - < 20
Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts	68425-94-5	>= 2.5 - < 10
Sulfuric acid, mono-C10-16-alkyl esters, sodium salts	68585-47-7	>= 3 - < 10

4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

- If symptoms persist, call a physician.
- In case of skin contact : Wash off with soap and plenty of water.
Call a physician if irritation develops or persists.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : May cause damage to organs through prolonged or repeated exposure.
- Notes to physician : Treat symptomatically.
-

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Dry chemical, CO₂, water spray or regular foam.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Fire may produce irritating, corrosive and/or toxic gases.
Chlorinated compounds
Nitrogen oxides (NO_x)
Carbon oxides
Sulfur oxides
- Specific extinguishing methods : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for fire-fighters : Firefighters should wear protective clothing and self-contained breathing apparatus.
-

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency measures : Avoid dust formation.
Use personal protective equipment.

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version 1.0 Revision Date: 06.06.2024 SDS Number: 50002903 Date of last issue: -
Date of first issue: 06.06.2024

gency procedures

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform
respective authorities.

Methods and materials for : Keep in suitable, closed containers for disposal.
containment and cleaning up

7. HANDLING AND STORAGE

Advice on protection against : Provide appropriate exhaust ventilation at places where dust
fire and explosion is formed.

Advice on safe handling : Avoid formation of respirable particles.
Do not breathe vapors/dust.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the ap-
plication area.
Dispose of rinse water in accordance with local and national
regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated
place.
Containers which are opened must be carefully resealed and
kept upright to prevent leakage.
Electrical installations / working materials must comply with
the technological safety standards.

Further information on stor- : Keep in a dry place.
age stability No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	14807-96-6	TWA	0.1 fibres per cubic centimeter	ACGIH
		TWA (Res- pirable par- ticulate mat- ter)	2 mg/m ³	ACGIH
metribuzin (ISO)	21087-64-9	TWA	5 mg/m ³	ACGIH

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ven-
tilation is provided or exposure assessment demonstrates that

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

exposures are within recommended exposure guidelines.

Filter type : Particulates type

Hand protection
Material : Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

Skin and body protection : Dust impervious protective suit
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Protective measures : Always have on hand a first-aid kit, together with proper instructions.

Hygiene measures : Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : solid

Form : dry, free flowing, water dispersible granules

Color : cream

Odor : No data available

pH : 8.96 (25 °C)
(1% solution in water)

Melting point/freezing point : not determined

Boiling point/boiling range : Not applicable

Flash point : Not applicable

Flammability (liquids) : Not applicable

Self-ignition : No data available

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Vapor pressure	:	not determined
Density	:	No data available
Bulk density	:	No data available
Solubility(ies)	:	
Water solubility	:	dispersible
Partition coefficient: n-octanol/water	:	Not applicable
Viscosity	:	
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive
Oxidizing properties	:	Non-oxidizing

10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed. Dust may form explosive mixture in air.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Strong acids and strong bases Strong oxidizing agents
Hazardous decomposition products	:	No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Based on available data, the classification criteria are not met.

Product:

Acute oral toxicity	:	LD50(Rat, female): > 2,000 mg/kg Method: OECD Test Guideline 423 Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	:	LC50(Rat, male and female): > 5.17 mg/l Exposure time: 4 h

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50(Rat, female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Components:

Bixlozone:

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg
Method: OECD Test Guideline 425
Symptoms: hypoactivity, Breathing difficulties
GLP: yes
Assessment: The component/mixture is minimally toxic after single ingestion.
Remarks: no mortality

Acute inhalation toxicity : LC50 (Rat, male and female): > 2.11 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Symptoms: Breathing difficulties
GLP: yes
Remarks: no mortality

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Symptoms: Irritation
GLP: yes
Assessment: The component/mixture is minimally toxic after single contact with skin.
Remarks: no mortality

metribuzin (ISO):

Acute oral toxicity : LD50 (Rat, female): 322 mg/kg

LD50 (Rat, male): 510 mg/kg

LD50 (Mouse): 700 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 2.05 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Highest attainable concentration.

LC50 (Rat, male and female): > 0.648 mg/l

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Highest attainable concentration.

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

Talc (Mg₃H₂(SiO₃)₄):

Acute oral toxicity : LD0 (Rat, male): > 5,000 mg/kg
Method: OECD Test Guideline 423
Remarks: no mortality

Acute inhalation toxicity : LC0 (Rat, male and female): > 2.1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Remarks: no mortality

Acute dermal toxicity : LD0 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Remarks: no mortality

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Sulfuric acid, mono-C10-16-alkyl esters, sodium salts:

Acute oral toxicity : LD50 (Rat): 1,200 mg/kg

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Product:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

Components:

Bixlozone:

Species : Rabbit
Assessment : Not classified as irritant

Method : OECD Test Guideline 404
Result : slight or no skin irritation.
GLP : yes
Remarks : Minimal effects that do not meet the threshold for classifica-

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version 1.0 Revision Date: 06.06.2024 SDS Number: 50002903 Date of last issue: -
Date of first issue: 06.06.2024

tion.

metribuzin (ISO):

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

Talc (Mg₃H₂(SiO₃)₄):

Species : reconstructed human epidermis (RhE)
Result : No skin irritation

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

Remarks : No data available

Sulfuric acid, mono-C10-16-alkyl esters, sodium salts:

Result : Skin irritation

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Product:

Species : Rabbit
Method : OECD Test Guideline 405
Result : No eye irritation

Components:

Bixlozone:

Species : Rabbit
Assessment : Not classified as irritant
Method : OECD Test Guideline 405
Result : Slight or no eye irritation
GLP : yes
Remarks : Minimal effects that do not meet the threshold for classification.

metribuzin (ISO):

Species : Rabbit
Method : OECD Test Guideline 405
Result : No eye irritation

Talc (Mg₃H₂(SiO₃)₄):

Species : Rabbit
Method : OECD Test Guideline 405
Result : No eye irritation

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

Result : Eye irritation

Sulfuric acid, mono-C10-16-alkyl esters, sodium salts:

Result : Irreversible effects on the eye

Respiratory or skin sensitization

Skin sensitization

Based on available data, the classification criteria are not met.

Respiratory sensitization

Not classified due to lack of data.

Product:

Test Type : Local lymph node assay (LLNA)
Routes of exposure : Skin contact
Species : mice
Method : OECD Test Guideline 429
Result : Not a skin sensitizer.

Components:

Bixlozone:

Test Type : Local lymph node assay (LLNA)
Species : Mouse
Method : OECD Test Guideline 429
Result : Does not cause skin sensitization.
GLP : yes

metribuzin (ISO):

Test Type : Buehler Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitization.

Talc (Mg₃H₂(SiO₃)₄):

Test Type : Maximization Test
Routes of exposure : Dermal
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitization.

Routes of exposure : Inhalation
Species : Rat
Result : Does not cause respiratory sensitization.

Sulfuric acid, mono-C10-16-alkyl esters, sodium salts:

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version 1.0 Revision Date: 06.06.2024 SDS Number: 50002903 Date of last issue: -
Date of first issue: 06.06.2024

Result : Not a skin sensitizer.

Germ cell mutagenicity

Not classified based on available information.

Components:

Bixlozone:

Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes

Test Type: In vitro mammalian cell gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 490
Result: negative
GLP: yes

Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: yes

Genotoxicity in vivo : Test Type: Micronucleus test
Cell type: Bone marrow
Method: OECD Test Guideline 474
Result: negative
GLP: yes

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

metribuzin (ISO):

Germ cell mutagenicity - Assessment : Weight of evidence does not support classification as a germ cell mutagen.

Talc (Mg₃H₂(SiO₃)₄):

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Result: negative

Test Type: gene mutation test
Method: QSAR
Result: negative

Test Type: reverse mutation assay
Result: negative

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Genotoxicity in vivo : Test Type: dominant lethal test
Species: Rat (male)
Application Route: Oral
Result: negative

Germ cell mutagenicity - Assessment : Weight of evidence does not support classification as a germ cell mutagen.

Sulfuric acid, mono-C10-16-alkyl esters, sodium salts:

Genotoxicity in vitro : Result: negative

Genotoxicity in vivo : Result: negative

Carcinogenicity

Not classified based on available information.

Components:

Bixlozone:

Species : Mouse
Application Route : Oral
Exposure time : 18 month(s)
: 647 mg/kg bw/day
Method : OECD Test Guideline 451
Result : negative
GLP : yes

Species : Rat, female
Application Route : Oral
Exposure time : 2 Years
NOAEL : 167 mg/kg bw/day
Method : OECD Test Guideline 453
Result : negative
GLP : yes

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

metribuzin (ISO):

Species : Rat, male
Application Route : Oral
Exposure time : 2 Years
NOAEL : 1.3 mg/kg bw/day

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

Talc (Mg₃H₂(SiO₃)₄):

Species : Rat, male and female
Application Route : Oral

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Exposure time : 101 days
Dose : 100 mg/kg bw/day
NOAEL : 100 mg/kg bw/day
Method : OECD Test Guideline 453
Result : negative
Target Organs : Stomach
Tumor Type : Leiomyosarcoma

Carcinogenicity - Assessment : Weight of evidence does not support classification as a carcinogen

Sulfuric acid, mono-C10-16-alkyl esters, sodium salts:

Species : Rat, male and female
Exposure time : 2 Years
Method : OECD Test Guideline 453
Result : negative
Remarks : Based on data from similar materials

Reproductive toxicity

Not classified based on available information.

Components:

Bixlozone:

Effects on fertility : Test Type: Two-generation study
Species: Rat, male
General Toxicity Parent: NOAEL: 140 mg/kg bw/day
Early Embryonic Development: NOAEL: 34 - 60 mg/kg bw/day
Method: OECD Test Guideline 416
GLP: yes

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 75 mg/kg bw/day
Embryo-fetal toxicity.: NOAEL: 550 mg/kg bw/day
Method: OECD Test Guideline 414
Result: negative
GLP: yes

Test Type: Embryo-fetal development
Species: Rabbit
Application Route: Oral
Dose: 25, 75, 200, 400 mg/kg bw/day
General Toxicity Maternal: NOAEL: 400 mg/kg bw/day
Embryo-fetal toxicity.: NOAEL: 400 mg/kg bw/day
Method: OECD Test Guideline 414
Result: negative
GLP: yes

Reproductive toxicity - As- : Weight of evidence does not support classification for repro-

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version 1.0 Revision Date: 06.06.2024 SDS Number: 50002903 Date of last issue: -
Date of first issue: 06.06.2024

Species : Rat, male
NOAEL : 121 mg/kg bw/day
Application Route : Oral - feed
Exposure time : 90 days
Method : OECD Test Guideline 408
GLP : yes

Species : Rat, female
NOAEL : 351 mg/kg bw/day
Application Route : Oral - feed
Exposure time : 90 days
Method : OECD Test Guideline 424
GLP : yes
Target Organs : Nervous system

Species : Rat, male
NOAEL : 359 mg/kg bw/day
Application Route : Oral - feed
Exposure time : 28 days
Method : OECD Test Guideline 407
GLP : yes
Target Organs : Liver

Species : Rat
NOAEL : 1000 mg/kg bw/day
Application Route : Dermal
Exposure time : 21 d
Method : OECD Test Guideline 410
GLP : yes

metribuzin (ISO):

Species : Rat
NOAEL : <5 mg/kg bw/day
Application Route : Oral
Exposure time : 90-day

Talc (Mg₃H₂(SiO₃)₄):

Species : Rat, male and female
NOAEL : 100 mg/kg
Application Route : Oral - feed
Exposure time : 101 d
Dose : 100 mg/kg bw/day

Species : Rat, male and female
NOAEL : 2 mg/m³
LOAEL : 6 mg/m³
Application Route : inhalation (dust/mist/fume)
Test atmosphere : dust/mist
Exposure time : 20 d
Dose : 0, 2, 6, 18 mg/m³

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Sulfuric acid, mono-C10-16-alkyl esters, sodium salts:

Species	: Rat, male and female
Application Route	: Oral
Exposure time	: 13 weeks
Method	: OECD Test Guideline 408
Remarks	: No significant adverse effects were reported Based on data from similar materials

Aspiration toxicity

Not classified based on available information.

Components:

Bixlozone:

The substance does not have properties associated with aspiration hazard potential.

Neurological effects

Components:

Bixlozone:

No neurotoxicity observed in animal studies.

Further information

Product:

Remarks	: No data available
---------	---------------------

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish	: LC50 (Cyprinus carpio (Carp)): 8.3 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203
Toxicity to soil dwelling organisms	: NOEC: > 1,000 mg/kg Exposure time: 14 d Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207 LC50: > 1,000 mg/kg Exposure time: 14 d Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207
Toxicity to terrestrial organisms	: LD50: > 240 µg/bee Exposure time: 48 h End point: Acute oral toxicity

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Species: Apis mellifera L.
Method: OECD Test Guideline 213

LD50: > 240 µg/bee
Exposure time: 48 h
End point: Acute contact toxicity
Species: Apis mellifera L.
Method: OECD Test Guideline 214

LD50: > 2,000 mg/kg
End point: Acute oral toxicity
Species: chicken
Method: OECD Test Guideline 223

Components:

Bixlozone:

Toxicity to fish

: LC50 (Oncorhynchus mykiss (rainbow trout)): 9.8 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes

NOEC (Brachydanio rerio (zebrafish)): 50 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes

LC50 (Cyprinodon variegatus (sheepshead minnow)): > 14 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes

NOEC (Cyprinodon variegatus (sheepshead minnow)): 2.2 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes

LC50 (Lepomis macrochirus (Bluegill sunfish)): > 13 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes

NOEC (Lepomis macrochirus (Bluegill sunfish)): 3.2 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Thamnocephalus platyurus): 0.11 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

EC50 (Daphnia magna (Water flea)): > 2.6 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

(Daphnia magna (Water flea)): 13 mg/l
End point: Immobilization
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants : EC10 (Myriophyllum spicatum): 0.0071 mg/l
Exposure time: 14 d
Method: OECD Test Guideline 201

EC50 (Skeletonema costatum (marine diatom)): 0.76 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201

EC10 (Skeletonema costatum (marine diatom)): 0.24 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201

EyC50 (Pseudokirchneriella subcapitata (microalgae)): 6.5 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC: 0.38 mg/l
Exposure time: 32 d
Species: Pimephales promelas (fathead minnow)
Test Type: Early Life-Stage
Method: OECD Test Guideline 210
GLP: yes

NOEC: 0.1 mg/l
End point: reproduction
Exposure time: 21 d
Species: Pimephales promelas (fathead minnow)
Test Type: flow-through test
Method: OECD Test Guideline 229
GLP: yes

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 3.1 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: Static renewal test
Method: OECD Test Guideline 211
GLP: yes

NOEC: 0.12 mg/l
Exposure time: 28 d
Species: Americamysis bahia (mysid shrimp)
Test Type: Reproduction Test
Method: OPPTS 850.1350

M-Factor (Chronic aquatic toxicity) : 10

Toxicity to soil dwelling organisms : LC50: 607 mg/kg
Species: Eisenia fetida (earthworms)
Method: OECD Test Guideline 207
GLP: yes

Method: OECD Test Guideline 217
Remarks: No significant adverse effect on Carbon mineralization.

Method: OECD Test Guideline 216
Remarks: No significant adverse effect on Nitrogen mineralization.

Toxicity to terrestrial organisms : LC50: > 5,000 mg/kg
Species: Anas platyrhynchos (Mallard duck)
Method: OECD Test Guideline 205

LOEC: 122 mg/kg
End point: Reproduction Test
Species: Anas platyrhynchos (Mallard duck)
Method: OECD Test Guideline 206
GLP: yes

NOEC: 69.6 mg/kg
End point: Reproduction Test
Species: Anas platyrhynchos (Mallard duck)
Method: OECD Test Guideline 206
GLP: yes

NOEL: 2,000 mg/kg
Species: Colinus virginianus (Bobwhite quail)
Method: OPPTS 850.2100

NOEC: 77.7 mg/kg
End point: Reproduction Test
Species: Colinus virginianus (Bobwhite quail)

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Method: OECD Test Guideline 206

LOEC: 103 mg/kg
End point: Reproduction Test
Species: *Colinus virginianus* (Bobwhite quail)
Method: OECD Test Guideline 206
GLP: yes

LD50: > 100 µg/bee
End point: Acute contact toxicity
Species: *Apis mellifera* (bees)
Method: OECD Test Guideline 214

LD50: > 100 µg/bee
End point: Acute oral toxicity
Species: *Apis mellifera* (bees)
Method: OECD Test Guideline 213

LD50: 59 µg/bee
Exposure time: 72 h
End point: honey bee larval toxicity test
Species: *Apis mellifera* (bees)
Method: OECD 237
GLP: yes

NOEC: ca. 9.5 µg/bee
Exposure time: 10 d
Species: *Apis mellifera* (bees)
GLP: yes
Remarks: Dietary

NOED: 6.3 µg/bee
Exposure time: 22 d
Species: *Apis mellifera* (bees)
GLP: yes
Remarks: Dietary

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.
Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

metribuzin (ISO):

Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 74.6 mg/l
Exposure time: 96 h
LC50 (*Leuciscus idus* (Golden orfe)): 141.6 mg/l
Exposure time: 96 h
LC50 (*Cyprinodon variegatus* (sheepshead minnow)): 85 mg/l
Exposure time: 96 h

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 49.6 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Desmodosmus subspicatus (green algae)): 0.022 mg/l
Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 10

Toxicity to microorganisms : EC50 (activated sludge): 761 mg/l

M-Factor (Chronic aquatic toxicity) : 10

Toxicity to soil dwelling organisms : LC50: 331.8 mg/kg
Species: Eisenia fetida (earthworms)

Toxicity to terrestrial organisms : LD50: 164 mg/kg
Species: Colinus virginianus (Bobwhite quail)

LD50: 460 - 680 mg/kg
Species: Anas platyrhynchos (Mallard duck)

LD50: 35 µg/bee
Species: Apis mellifera (bees)

Talc (Mg₃H₂(SiO₃)₄):

Toxicity to fish : LC50 (Fish): 89,581.016 mg/l
Exposure time: 96 h
Method: QSAR

Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 36,812.359 mg/l
Exposure time: 48 h
Method: QSAR

Toxicity to algae/aquatic plants : NOEC (green algae): 918.089 mg/l
Exposure time: 30 d
Method: QSAR

EC50 (green algae): 7,202.7 mg/l
Exposure time: 96 h
Method: QSAR

Toxicity to fish (Chronic toxicity) : NOEC: 1,412.648 mg/l
Exposure time: 30 d
Species: Fish
Method: QSAR

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 1,459.798 mg/l
Exposure time: 30 d
Species: Daphnia
Method: QSAR

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

- Toxicity to fish : LC50 (Zebra fish): > 10 - 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Based on data from similar materials
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials
- Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials
- EC10 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC10: > 10 - 100 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211
Remarks: Based on data from similar materials

Sulfuric acid, mono-C10-16-alkyl esters, sodium salts:

- Toxicity to fish : LC50 (Fish): 3.6 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Ceriodaphnia dubia (water flea)): 1.18 - 2.21 mg/l
Exposure time: 48 h
- Toxicity to algae/aquatic plants : EC50 (algae): 60 mg/l
Exposure time: 72 h

Ecotoxicology Assessment

- Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Persistence and degradability

Components:

Bixlozone:

- Biodegradability : Result: Not readily biodegradable.

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Stability in water : Hydrolysis: < 5 % at 25 °C(30 d)
Method: OECD Test Guideline 111
GLP: yes
Remarks: Does not readily hydrolyze

Photodegradation : Method: OECD Test Guideline 316
Remarks: Decomposes slowly in contact with light.

metribuzin (ISO):

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life (DT50): 7 d

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

Biodegradability : Result: Not readily biodegradable.
Remarks: Based on data from similar materials

Sulfuric acid, mono-C10-16-alkyl esters, sodium salts:

Biodegradability : Result: Readily biodegradable.

Bioaccumulative potential

Components:

Bixlozone:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): 100
Method: OECD Test Guideline 305
Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 3.3 (20 °C)
pH: 4 - 9
Method: OECD Test Guideline 107

metribuzin (ISO):

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: 1.6

Talc (Mg₃H₂(SiO₃)₄):

Bioaccumulation : Bioconcentration factor (BCF): 3.16
Method: QSAR

Partition coefficient: n-octanol/water : log Pow: -9.4 (25 °C)
pH: 7
Method: QSAR

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Mobility in soil

Components:

Bixlozone:

Distribution among environmental compartments : Remarks: Moderately mobile in soil

metribuzin (ISO):

Distribution among environmental compartments : Koc: 24 - 106 ml/g, log Koc: > 1.38
Remarks: Highly mobile in soils

Sulfuric acid, mono-C10-16-alkyl esters, sodium salts:

Distribution among environmental compartments : Koc: 196.1 ml/g, log Koc: 2.29
Remarks: Mobile in soils

Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Bixlozone, Metribuzin)
Class : 9

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Subsidiary risk : ENVIRONM.
Packing group : III
Labels : 9 (ENVIRONM.)
Environmentally hazardous : yes

IATA-DGR

UN/ID No. : UN 3077
Proper shipping name : Environmentally hazardous substance, solid, n.o.s.
(Bixlozone, Metribuzin)
Class : 9
Packing group : III
Labels : Miscellaneous
Packing instruction (cargo aircraft) : 956
Packing instruction (passenger aircraft) : 956
Environmentally hazardous : yes

IMDG-Code

UN number : UN 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
(Bixlozone, Metribuzin)
Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

The ingredients of this product are reported in the following inventories:

TCSI : Not in compliance with the inventory
TSCA : Product contains substance(s) not listed on TSCA inventory.
AIIC : Not in compliance with the inventory
DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

Bixlozone
metribuzin (ISO)

ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

16. OTHER INFORMATION

Revision Date	:	06.06.2024
Date format	:	dd.mm.yyyy

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH / TWA	:	8-hour, time-weighted average

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumu-

SAFETY DATA SHEET

according to the Globally Harmonized System



AMBRIVA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	06.06.2024	50002903	Date of first issue: 06.06.2024

lative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Disclaimer

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. You can contact FMC Corporation to insure that this document is the most current available from FMC Corporation. No warranty of fitness for any particular purpose, warranty of merchantability or any other warranty, expressed or implied, is made concerning the information provided herein. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. The user is responsible for determining whether the product is fit for a particular purpose and suitable for the user's conditions and methods of use. Since the conditions and methods of use are beyond the control of FMC Corporation, FMC Corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

IN / EN