

SAFETY DATA SHEET

ACCURATE®



Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ACCURATE®

Manufacturer or supplier's details

Company : FMC QUÍMICA DO BRASIL LTDA.

Address : AVENIDA DR. JOSÉ BONIFÁCIO
COUTINHO NOGUEIRA 150 - 1º
ANDAR - JARDIM MADALENA,
CAMPINAS SP BRASIL
TELEFONE: (19) 2042.4500

Emergency telephone : Brazil: 0800 34 35 450 (24 hours)
+55-2139581449 (CHEMTREC)

Medical Emergency Number : 0800 7010 450

Recommended use of the chemical and restrictions on use

Recommended use : Herbicide

Restrictions on use : Use as recommended by the label.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification in accordance with ABNT NBR 14725 Standard

Acute toxicity (Oral) : Category 5

Acute toxicity (Dermal) : Category 5

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 1

GHS label elements in accordance with ABNT NBR 14725 Standard

Hazard pictograms :



Signal Word : WARNING

Hazard Statements : H303 + H313 May be harmful if swallowed or in contact with skin.
H410 Very toxic to aquatic life with long lasting effects.

SAFETY DATA SHEET

ACCURATE®



Version 4.0 Revision Date: 28.06.2025 SDS Number: 50000349 Date of last issue: -
Date of first issue: 15.05.2017

Precautionary Statements : **Prevention:**
P273 Avoid release to the environment.
Response:
P312 Call a POISON CENTER/ doctor 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

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
Metsulfuron-methyl	74223-64-6	Aquatic Acute, 1 Aquatic Chronic, 1	≥ 50 -< 70
Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts	68425-94-5	Serious eye damage/eye irritation, 2A Aquatic Acute, 3 Aquatic Chronic, 3	≥ 5 -< 10
Bentonite	1302-78-9	Skin corrosion/irritation, 2 Serious eye damage/eye irritation, 2A STOT SE, (Respiratory system) , 3	≥ 5 -< 10
sodium dimethylnaphthalenesulphonate	27178-87-6	Acute Tox. (Oral), 5 Skin corrosion/irritation, 2 Serious eye damage/eye irritation, 1 Aquatic Acute, 3	≥ 3 -< 5
docusate sodium	577-11-7	Skin corrosion/irritation, 2 Serious eye damage/eye irritation, 1 Aquatic Acute, 3	≥ 1 -< 2,5

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

- Show this material 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.
If symptoms persist, call a physician.
- In case of skin contact : Wash off with soap and water.
If symptoms persist, call a physician.
Wash contaminated clothing before re-use.
- 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.
- Most important symptoms and effects, both acute and delayed : May be harmful if swallowed or in contact with skin.
- Protection of first-aiders : Avoid inhalation, ingestion and contact with skin and eyes.
- Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Dry chemical, CO₂, water spray or regular foam.
- Unsuitable extinguishing media : Do not spread spilled material with high-pressure water streams.
- 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.
Nitrogen oxides (NO_x)
Sulfur oxides
Carbon oxides
Hydrogen cyanide
- Specific extinguishing methods : Use a water spray to cool fully closed containers.
Remove undamaged containers from fire area if it is safe to do so.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.
Do not touch or walk through the spilled material.
If it can be safely done, stop the leak.
Ensure adequate ventilation.
Use personal protective equipment.
Avoid dust formation.
Avoid breathing dust.

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 containment and cleaning up : Never return spills in original containers for re-use.
Pick up and transfer to properly labeled containers without creating dust.
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

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

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

Hygiene measures : Avoid contact with skin, eyes and clothing.
Do not breathe dust.
When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

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.

SAFETY DATA SHEET

ACCURATE®



Version 4.0	Revision Date: 28.06.2025	SDS Number: 50000349	Date of last issue: - Date of first issue: 15.05.2017
----------------	------------------------------	-------------------------	--

Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Do not store near acids.

Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.

Filter type : Particulates type

Hand protection
Material : Protective gloves

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 : Plan first aid action before beginning work with this product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : solid

Form : granules

Color : brown

Odor : ester-like

Odor Threshold : No data available

pH : 3,7
Concentration: 50 g/l

SAFETY DATA SHEET

ACCURATE®



Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

Melting point/ range	:	162 °C
Boiling point/boiling range	:	No data available
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	Not applicable
Relative vapor density	:	Not applicable
Relative density	:	No data available
Density	:	480 - 700 kg/m ³ 0,48 - 0,7 g/cm ³
Solubility(ies)	:	
Water solubility	:	dispersible
Solubility in other solvents	:	37 g/l (25 °C) Solvent: Acetone 132 g/l (25 °C) Solvent: dichloromethane 7,32 g/l (25 °C) Solvent: Methanol 25,9 g/l (25 °C) Solvent: Acetonitrile 11,1 g/l (25 °C) Solvent: ethyl acetate 1,24 g/l (25 °C) Solvent: Toluene 50 - 100 g/l Solvent: isopropanol 0,08 g/l Solvent: hexane 0,69 g/l (20 °C) Solvent: n-heptane

SAFETY DATA SHEET



ACCURATE®

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive
Oxidizing properties	:	Non-oxidizing
Surface tension	:	Not applicable
Molecular weight	:	Not applicable

SECTION 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	:	Dust may form explosive mixture in air. No decomposition if stored and applied as directed.
Conditions to avoid	:	Avoid extreme temperatures. Avoid dust formation.
Incompatible materials	:	Avoid strong acids, bases, and oxidizers.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	:	Inhalation Skin contact
--	---	----------------------------

Acute toxicity

May be harmful if swallowed or in contact with skin.

Product:

Acute oral toxicity	:	LD50 (Rat, male and female): > 2.000 mg/kg Assessment: The component/mixture is minimally toxic after single ingestion. Remarks: no mortality
---------------------	---	---

Version 4.0	Revision Date: 28.06.2025	SDS Number: 50000349	Date of last issue: - Date of first issue: 15.05.2017
----------------	------------------------------	-------------------------	--

Acute inhalation toxicity : LC50 (Rat): > 5,11 mg/l
 Exposure time: 4 h
 Test atmosphere: dust/mist
 Symptoms: Salivation
 Assessment: The substance or mixture has no acute inhalation toxicity
 Remarks: no mortality

Acute dermal toxicity : LD50 (Rat, male and female): > 4.000 mg/kg
 Remarks: no mortality

Components:

Metsulfuron-methyl:

Acute oral toxicity : LD50 (Rat, male and female): > 5.000 mg/kg
 Method: US EPA Test Guideline OPP 81-1
 Assessment: The substance or mixture has no acute oral toxicity

LD50 (Rat, female): > 5.000 mg/kg
 Method: OECD Test Guideline 425
 GLP: yes
 Assessment: The substance or mixture has no acute oral toxicity
 Remarks: no mortality

Acute inhalation toxicity : LC50 (Rat, male and female): > 5,11 mg/l
 Exposure time: 4 h
 Test atmosphere: dust/mist
 Method: OECD Test Guideline 403
 Symptoms: Breathing difficulties
 GLP: yes
 Assessment: The substance or mixture has no acute inhalation toxicity
 Remarks: no mortality

Acute dermal toxicity : LD50 (Rabbit, male and female): > 5.000 mg/kg
 Method: OECD Test Guideline 402
 Symptoms: Irritation
 GLP: yes
 Assessment: The substance or mixture has no acute dermal toxicity
 Remarks: no mortality

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

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

sodium dimethylnaphthalenesulphonate:

Acute oral toxicity : LD50 (Rat): > 2.000 - 5.000 mg/kg
 Method: OECD Test Guideline 401

LD50 (Rat): > 3.000 - 5.000 mg/kg

SAFETY DATA SHEET



ACCURATE®

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

Method: OECD Test Guideline 401
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg
Method: OECD Test Guideline 404
Remarks: Based on data from similar materials

docusate sodium:

Acute oral toxicity : LD50 (Rat, male and female): > 2.100 mg/kg
Method: OECD Test Guideline 401
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50 (Rabbit, male): > 10.000 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation

Not classified based on available information.

Product:

Species : Rabbit
Assessment : Not classified as irritant
Result : slight irritation

Components:

Metsulfuron-methyl:

Species : Rabbit
Assessment : Not classified as irritant
Method : US EPA Test Guideline OPP 81-5
Result : No skin irritation

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

Remarks : No data available

Bentonite:

Assessment : Irritating to skin.

sodium dimethylnaphthalenesulphonate:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation

docusate sodium:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Species	:	Rabbit
Result	:	slight irritation
Assessment	:	Not classified as irritant

Components:**Metsulfuron-methyl:**

Species	:	Rabbit
Result	:	slight irritation
Assessment	:	Not classified as irritant
Method	:	EPA OPP 81-4

Species	:	Rabbit
Result	:	slight irritation
Assessment	:	Not classified as irritant

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

Result	:	Eye irritation
--------	---	----------------

Bentonite:

Assessment	:	Irritating to eyes.
------------	---	---------------------

sodium dimethylnaphthalenesulphonate:

Result	:	Irreversible effects on the eye
Method	:	OECD Test Guideline 437

Species	:	Rabbit
Result	:	Irreversible effects on the eye
Method	:	OECD Test Guideline 405
Remarks	:	Based on data from similar materials

docusate sodium:

Species	:	Rabbit
Result	:	Risk of serious damage to eyes.
Method	:	OECD Test Guideline 405

Respiratory or skin sensitization**Skin sensitization**

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

Product:

Test Type	: Buehler Test
Species	: Guinea pig
Assessment	: Did not cause sensitization on laboratory animals.
Result	: Does not cause skin sensitization.

Components:**Metsulfuron-methyl:**

Test Type	: Maximization Test
Routes of exposure	: Skin contact
Species	: Guinea pig
Method	: US EPA Test Guideline OPPTS 870.2600
Result	: Not a skin sensitizer.

sodium dimethylnaphthalenesulphonate:

Result	: Does not cause skin sensitization.
--------	--------------------------------------

docosate sodium:

Routes of exposure	: Skin contact
Species	: Humans
Result	: Does not cause skin sensitization.

Germ cell mutagenicity

Not classified based on available information.

Product:

Genotoxicity in vitro	: Test Type: Ames test Metabolic activation: with and without metabolic activation Result: negative
Genotoxicity in vivo	: Test Type: Micronucleus test Species: mice Result: negative
Germ cell mutagenicity - Assessment	: In vitro tests did not show mutagenic effects

Components:**Metsulfuron-methyl:**

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: Chromosome aberration test in vitro Metabolic activation: Metabolic activation Result: positive GLP: yes
-----------------------	--

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse
Result: negative

sodium dimethylnaphthalenesulphonate:

Genotoxicity in vitro : Method: OECD Test Guideline 471
Result: negative

Method: OECD Test Guideline 476
Result: negative

docusate sodium:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

Genotoxicity in vivo : Remarks: No data available

Carcinogenicity

Not classified based on available information.

Product:

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

Components:**Metsulfuron-methyl:**

Species : Rat, male and female
Exposure time : 104 weeks
NOAEL : 500 ppm
Result : negative

Species : Mouse, male and female
Exposure time : 18 month(s)
NOAEL : 5.000 ppm
Result : negative

Reproductive toxicity

Not classified based on available information.

Product:

Reproductive toxicity - Assessment : Weight of evidence does not support classification for reproductive toxicity

Components:**Metsulfuron-methyl:**

Effects on fertility : Test Type: Two-generation study
Species: Rat, male and female
Application Route: Oral

SAFETY DATA SHEET



ACCURATE®

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rabbit, female
Application Route: Ingestion
Symptoms: Maternal effects.
Result: negative

Test Type: Embryo-fetal development
Species: Rat, female
Application Route: Ingestion
Symptoms: Maternal effects.
Result: negative

docusate sodium:

Effects on fertility : Test Type: reproductive and developmental toxicity study
Species: Rat, male and female
Application Route: Ingestion
Method: OECD Test Guideline 416
Result: negative

Effects on fetal development : Test Type: reproductive and developmental toxicity study
Species: Rat
Duration of Single Treatment: 6 - 15 d
Method: OECD Test Guideline 414
Result: Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses

STOT-single exposure

Not classified based on available information.

Product:

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Components:

Bentonite:

Assessment : May cause respiratory irritation.

STOT-repeated exposure

Not classified based on available information.

Product:

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

Metsulfuron-methyl:

SAFETY DATA SHEET



ACCURATE®

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

Species	: Rat, male and female
NOEL	: 1000 ppm
Application Route	: Oral - feed
Exposure time	: 90 days
Symptoms	: Reduced body weight

docusate sodium:

Species	: Rat, male and female
NOAEL	: 750 mg/kg
Application Route	: Oral
Exposure time	: 90 d
Method	: OECD Test Guideline 408

Aspiration toxicity

Not classified based on available information.

Neurological effects

Components:

Metsulfuron-methyl:

No neurotoxicity observed in animal studies.

Further information

Product:

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish	: LC50 (<i>Salmo gairdneri</i>): > 150 mg/l Exposure time: 96 h LC50 (<i>Danio rerio</i> (zebra fish)): 142 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (<i>Daphnia magna</i> (Water flea)): 186 mg/l End point: Immobilization Exposure time: 48 h
Toxicity to algae/aquatic plants	: EC50 (<i>Selenastrum capricornutum</i> (green algae)): 0,045 mg/l Exposure time: 96 h EC50 (<i>Pseudokirchneriella subcapitata</i> (algae)): 3,69 mg/l End point: Growth inhibition Exposure time: 72 h
Toxicity to soil dwelling organisms	: Remarks: No significant adverse effect on Nitrogen mineralization.

SAFETY DATA SHEET

ACCURATE®



Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

Remarks: No significant adverse effect on Carbon mineralization.

LC50 (*Eisenia fetida* (earthworms)): > 10.000 mg/kg
Exposure time: 14 d

Toxicity to terrestrial organisms : LD50 (*Apis mellifera* (bees)): > 100 µg/bee
End point: Acute contact toxicity

LD50 (*Anas platyrhynchos* (Mallard duck)): > 2.510 mg/kg

LD50 (*Coturnix japonica* (Japanese quail)): > 2.000 mg/kg

Components:

Metsulfuron-methyl:

Toxicity to fish : LC50 (*Poecilia reticulata* (guppy)): > 100 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): > 120 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

EC50 (*Daphnia magna* (Water flea)): 43,1 mg/l
End point: Immobilization
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants : ErC50 (*Anabaena flos-aquae* (cyanobacterium)): 65,7 µg/l
Exposure time: 96 h
Method: OPPTS 850.5400
GLP: yes

NOEC (*Anabaena flos-aquae* (cyanobacterium)): 45 µg/l
Exposure time: 96 h
Method: OPPTS 850.5400
GLP: yes

ErC50 (*Selenastrum capricornutum* (green algae)): 157 µg/l
Exposure time: 72 h
GLP: yes

NOEC (*Selenastrum capricornutum* (green algae)): 50 µg/l
Exposure time: 72 h
GLP: yes

M-Factor (Acute aquatic toxicity) : 10

Toxicity to fish (Chronic toxicity) : NOEC (*Oncorhynchus mykiss* (rainbow trout)): 68 mg/l
Exposure time: 21 d

SAFETY DATA SHEET



ACCURATE®

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

NOEC (Pimephales promelas (fathead minnow)): 10 mg/l
End point: reproduction
Exposure time: 21 d
Method: OECD Test Guideline 229
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 3,13 mg/l
End point: reproduction
Exposure time: 21 d
Test Type: semi-static test
Method: OECD Test Guideline 211

NOEC (Daphnia magna (Water flea)): 0,5 mg/l
Exposure time: 21 d

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to soil dwelling organisms : NOEC (Eisenia fetida (earthworms)): 6 mg/kg
Exposure time: 56 d

NOEC (Eisenia fetida (earthworms)): 5,6 mg/kg
End point: reproduction
Method: OECD Test Guideline 222
GLP: yes

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

Toxicity to terrestrial organisms : LD50 (Apis mellifera (bees)): > 50 µg/bee
Exposure time: 48 h
End point: Acute contact toxicity
Method: OEPP/EPPO Test Guideline 170

LD50 (Apis mellifera (bees)): > 50 µg/bee
Exposure time: 48 h
End point: Acute oral toxicity
Method: OEPP/EPPO Test Guideline 170

LD50 (Anas platyrhynchos (Mallard duck)): > 2.510 mg/kg

NOEC (Colinus virginianus): 1.000 mg/kg
End point: Reproduction Test

NOEC (Anas platyrhynchos (Mallard duck)): 1.000 ppm
End point: Reproduction Test
Method: OECD Test Guideline 206

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

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

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 (Daphnia magna (Water flea)): > 10 - 100 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211
Remarks: Based on data from similar materials

sodium dimethylnaphthalenesulphonate:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 10 - 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC10 (Pseudokirchneriella subcapitata (green algae)): 135 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

EC50 (Pseudokirchneriella subcapitata (green algae)): > 810 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC10 (Daphnia magna (Water flea)): > 1 - 10 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Toxicity to microorganisms : EC10 (Pseudomonas putida): > 100 mg/l
Exposure time: 16,5 h
Method: DIN 38 412 Part 8
Remarks: Based on data from similar materials

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

Ecotoxicology Assessment

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

docusate sodium:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 49 mg/l
Exposure time: 96 h
Method: Regulation (EC) No. 440/2008, Annex, C.1

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 15,2 mg/l
Exposure time: 48 h
Method: Regulation (EC) No. 440/2008, Annex, C.2

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 82,5 mg/l
Exposure time: 72 h
Method: Regulation (EC) No. 440/2008, Annex, C.3

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC10 (Daphnia magna (Water flea)): 9 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Toxicity to microorganisms : EC50 (Pseudomonas putida): 164 mg/l
Exposure time: 16,5 h
Method: DIN 38 412 Part 8

EC10 (Pseudomonas putida): 122 mg/l
Exposure time: 16,5 h

Persistence and degradability**Components:****Metsulfuron-methyl:**

Biodegradability : Result: Not readily biodegradable.
Remarks: Primary degradation half-lives vary with circumstances, from a few weeks to a few months in aerobic soil and water.

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

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

sodium dimethylnaphthalenesulphonate:

Biodegradability : Result: Inherently biodegradable.
Method: OECD Test Guideline 301D

docusate sodium:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 91 %

SAFETY DATA SHEET

ACCURATE®



Version 4.0	Revision Date: 28.06.2025	SDS Number: 50000349	Date of last issue: - Date of first issue: 15.05.2017
----------------	------------------------------	-------------------------	--

Exposure time: 28 d

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Components:

Metsulfuron-methyl:

Bioaccumulation : Species: *Lepomis macrochirus* (Bluegill sunfish)
Bioconcentration factor (BCF): < 1
Exposure time: 28 d
Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : Pow: 0,018 (25 °C)
log Pow: -1,7 (25 °C)
pH: 7

docusate sodium:

Bioaccumulation : Remarks: Not applicable

Partition coefficient: n-octanol/water : log Pow: 1,998 (20 °C)

Mobility in soil

Product:

Distribution among environmental compartments : Remarks: Mobile in soils

Components:

Metsulfuron-methyl:

Distribution among environmental compartments : Remarks: Under normal conditions the substance/mixture is mobile in soil.

Other adverse effects

Product:

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

SECTION 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 chemi-

SAFETY DATA SHEET



ACCURATE®

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

cal or used container.
Send to a licensed waste management company.

Contaminated packaging : It is prohibited to reuse, bury, burn or sell packaging.

Washable packaging: Triple wash packs of less than 20 liters and pressure wash packs of 20 liters or more. Triple Wash (Manual Wash): Completely empty the contents of the package into the sprayer tank, keeping it in an upright position for 30 seconds; Add clean water to the package up to ¼ of its volume; Cover the package well and shake it for 30 seconds; Pour the wash water into the spray tank; Do this operation three times; Make the plastic or metal packaging unusable by perforating the bottom.

Pressure wash: Fit the empty package in the appropriate place of the funnel installed on the sprayer; Activate the mechanism to release the water jet; Direct the water jet to all the inside walls of the package, for 30 seconds; Wash water must be transferred to the sprayer tank; Make the plastic or metal packaging unusable by perforating the bottom. In both procedures, puncture the container at its base without damaging the label. Within a period of up to one year from the date of purchase, the user must return the empty packaging, with lid, to the establishment where the product was purchased or to the place indicated on the invoice, issued at the time of purchase. Activate the mechanism to release the water jet. Direct the water jet to all the inside walls of the package, for 30 seconds. Wash water must be transferred to the sprayer tank. Make the plastic or metal packaging unusable by perforating the bottom.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metsulfuron-methyl)

Class : 9
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. (Metsulfuron-methyl)

Class : 9
Packing group : III
Labels : Miscellaneous

SAFETY DATA SHEET



ACCURATE®

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

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. (Metsulfuron-methyl)

Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

ANTT

UN number : UN 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metsulfuron-methyl)

Class : 9
Packing group : III
Labels : 9
Hazard Identification Number : 90

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.

SECTION 15. REGULATORY INFORMATION

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

Law No. 14,785 of December 27, 2023. Decree 4,074 of January 4, 2002 and its regulatory standards. ANTT Resolution No. 5,998/22 of November 3, 2022. This MSDS was prepared in accordance with the criteria of ABNT NBR 14725. The user is recommended to pay attention to local regulations.

Law No. 14,785 of December 27, 2023. Decree 4,074 of January 4, 2002 and its regulatory standards. ANTT Resolution No. 5,998/22 of November 3, 2022. This MSDS was prepared in accordance with the criteria of ABNT NBR 14725. The user is recommended to pay attention to local regulations.

National List of Carcinogenic Agents for Humans - (LINACH) : Not applicable

SAFETY DATA SHEET



ACCURATE®

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

Brazil. List of chemicals controlled by the Federal Police : Not applicable

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

TCSI	: On the inventory, or 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. METHYL 2-[[[4-METHOXY-6-METHYL-1,3,5-TRIAZIN-2-YL)CARBAMOYL]SULFAMOYL]BENZOATE
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	: On the inventory, or in compliance with the inventory
NZIoC	: Not in compliance with the inventory
TECI	: Not in compliance with the inventory

SECTION 16. OTHER INFORMATION

Revision Date	: 28.06.2025
Date format	: dd.mm.yyyy

Full text of other abbreviations

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 Or-

SAFETY DATA SHEET



ACCURATE®

Version	Revision Date:	SDS Number:	Date of last issue: -
4.0	28.06.2025	50000349	Date of first issue: 15.05.2017

ganisation 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, Bioaccumulative 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.

BR / EN