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| SAFETY DATA SHEET | | Revision Date: 04/15/2019 |
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SECTION 1. IDENTIFICATION

Product identifier

Trade name : Biosperse™ CN7539
MICROBIOCIDE
™ Trademark, Solenis or its subsidiaries or affiliates,
registered in various countries

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : Biocide

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| Details of the supplier of the safety data sheet Solenis LLC 500 Hercules Road Wilmington, Delaware 19808 United States of America (USA) RegulatoryRequestsNA@solenis.com Solenis LLC | Emergency telephone number 1-844-SOLENIS (844-765-3647) Product Information Contact your local Solenis representative |
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SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200



Corrosive to metals : Category 1

Skin corrosion : Category 1B

Serious eye damage : Category 1

Skin sensitisation : Category 1


GHS label elements

Hazard pictograms :  

Signal word : Danger

Hazard statements : H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.

Precautionary statements : **Prevention:**

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P234 Keep only in original container.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.

Storage:

P405 Store locked up.
P406 Store in corrosive resistant container with a resistant inner liner.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

| Chemical name | CAS-No. | Classification | Concentration (%) |
|--|------------|--|-------------------|
| bronopol (INN) | 52-51-7 | Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335 | >= 5 - < 10 |
| 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE | 26172-55-4 | Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 Skin Corr. 1B; H314 | >= 1.5 - < 3 |

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| | | Eye Dam. 1; H318 Skin Sens. 1; H317 | |
| SULFURIC ACID | 7664-93-9 | Met. Corr. 1; H290 Skin Corr. 1; H314 Eye Dam. 1; H318 | $\geq 0.5 - < 1$ |
| 2-METHYL-4-ISOTHIAZOLIN-3-ONE | 2682-20-4 | Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 3; H311 Skin Corr. 1; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 | $\geq 0.5 - < 1$ |

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Move to fresh air.
If breathed in, move person into fresh air.
Keep patient warm and at rest.
If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.
If on skin, rinse well with water.
Wash contaminated clothing before re-use.
- In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
- If swallowed : Get medical attention immediately.
Do NOT induce vomiting.
Rinse mouth with water.
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 cause an allergic skin reaction.
Causes serious eye damage.
Causes severe burns.
No symptoms known or expected.

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Notes to physician : No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
 Water spray
 Foam
 Carbon dioxide (CO₂)
 Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Bromine
 Carbon monoxide
 Carbon dioxide (CO₂)
 hydrogen bromide
 Nitrogen oxides (NO_x)
 Formaldehyde
 various hydrocarbons
 hydrogen chloride
 Sulphur oxides
 acid vapors
 Chlorine
 chlorine oxide
- Specific extinguishing methods : Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
 Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
 Comply with all applicable federal, state, and local regulations.
- 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 : Soak up with inert absorbent material (e.g. sand, silica gel,

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containment and cleaning up acid binder, universal binder, sawdust).
 Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.


Advice on safe handling : Do not breathe vapours/dust.
 Do not smoke.
 Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
 Container hazardous when empty.
 Avoid exposure - obtain special instructions before use.
 Avoid contact with skin and eyes.
 Smoking, eating and drinking should be prohibited in the application area.
 For personal protection see section 8.
 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.
 Observe label precautions.
 Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---------------|-----------|----------------------------------|---|-----------|
| SULFURIC ACID | 7664-93-9 | TWA (Thoracic fraction) | 0.2 mg/m ³ | ACGIH |
| | | TWA | 1 mg/m ³ | NIOSH REL |
| | | TWA | 1 mg/m ³ | OSHA Z-1 |
| | | TWA | 1 mg/m ³ | OSHA P0 |

Engineering measures : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

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Personal protective equipment

Hand protection

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

Eye protection : Wear chemical splash goggles and face shield when there is potential for exposure of the eyes or face to liquid, vapor or mist.
Maintain eye wash station in immediate work area.

Skin and body protection : Wear as appropriate:
Impervious clothing
Chemical resistant apron
Safety shoes
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Discard gloves that show tears, pinholes, or signs of wear.
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : Wash hands before breaks and at the end of workday.
When using do not eat or drink.
Ensure that eyewash stations and safety showers are close to the workstation location.
When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Aqueous solution

Colour : light green

Odour : odourless

Odour Threshold : No data available

pH : 2.5 - 3.5

Melting point/freezing point : ca. -4 °C


Boiling point/boiling range : No data available

Flash point : > 93.4 °C
Method: Pensky Martens closed cup

Evaporation rate : < 1
n-Butyl Acetate

Flammability (solid, gas) : No data available


Self-ignition : No data available

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| Upper explosion limit | : No data available |
| Lower explosion limit | : No data available |
| Vapour pressure | : 24 hPa |
| Relative vapour density | : < 1 AIR=1 |
| Relative density | : No data available |
| Density | : 1.08 - 1.12 g/cm ³ (25 °C) |
| Solubility(ies) | |
| Water solubility | : completely soluble |
| Solubility in other solvents | : No data available |
| Partition coefficient: n-octanol/water | : No data available |
| Decomposition temperature | : No data available |
| Viscosity | |
| Viscosity, dynamic | : 4 - 10 mPa.s (21 °C) |
| Viscosity, kinematic | : No data available |
| Oxidizing properties | : The substance or mixture is not classified as oxidizing. |
| Metal corrosion rate | : > 6.25 mm/a Corrosive to metals |

SECTION 10. STABILITY AND REACTIVITY

| | |
|------------------------------------|---|
| Reactivity | : No decomposition if stored and applied as directed. |
| Chemical stability | : Stable under recommended storage conditions. |
| Possibility of hazardous reactions | : Product will not undergo hazardous polymerization. |
| Conditions to avoid | : excessive heat temperatures above 194 degrees F (90 C degrees) |
| Incompatible materials | : Avoid contact with: aluminum amines Dimethylformamide Metals Organic materials |

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strong bases
 Strong oxidizing agents
 Peroxides

Hazardous decomposition products : Bromine
 Carbon monoxide
 Carbon dioxide (CO₂)
 Formaldehyde
 hydrogen bromide
 Nitrogen oxides (NO_x)
 Hydrocarbons
 Hydrogen chloride gas
 Sulphur oxides
 acid vapors
 Chlorine
 chlorine oxide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation
 Skin contact
 Eye Contact
 Ingestion

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: 3,503 mg/kg
 Method: Calculation method

Acute toxicity estimate: 2,395 mg/kg
 Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 40 mg/l
 Exposure time: 4 h
 Test atmosphere: vapour
 Method: Calculation method

Acute toxicity estimate: 50.02 mg/l
 Exposure time: 4 h
 Test atmosphere: vapour
 Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg
 Method: Calculation method

Components:

bronopol (INN):

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Acute oral toxicity : LD 50 (Rat, female): 342 mg/kg

LD 50 (Rat, male): 307 mg/kg

Acute dermal toxicity : LD 50 (Rat): 1,600 mg/kg

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE:

Acute oral toxicity : Assessment: The component/mixture is classified as acute oral toxicity, category 3.

Acute inhalation toxicity : Assessment: The component/mixture is classified as acute inhalation toxicity, category 3.

Acute dermal toxicity : Assessment: The component/mixture is classified as acute dermal toxicity, category 3.

SULFURIC ACID:

Acute oral toxicity : LD 50 (Rat): 2,140 mg/kg

 Acute inhalation toxicity : Assessment: Not classified as acutely toxic by inhalation under GHS.
 Remarks: see user defined free text

2-METHYL-4-ISOTHIAZOLIN-3-ONE:

 Acute oral toxicity : LD50 (Rat, female): 183 mg/kg
 Method: OECD Test Guideline 401
 GLP: yes

 LD50 (Rat, male): 235 mg/kg
 Method: OECD Test Guideline 401
 GLP: yes

 Acute dermal toxicity : LD50 (Rat): 242 mg/kg
 Method: OECD Test Guideline 402
 GLP: yes

Skin corrosion/irritation


Causes severe burns.

Product:

 Remarks: May cause skin irritation in susceptible persons.
 Causes severe skin burns and eye damage.

Components:
bronopol (INN):

 Species: Rabbit
 Method: OECD Test Guideline 404
 Result: Irritating to skin

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5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE:

Result: Corrosive after 3 minutes to 1 hour of exposure

SULFURIC ACID:

Result: Corrosive to skin

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks: May cause irreversible eye damage.

Components:

bronopol (INN):

Species: Rabbit

Result: Corrosive to eyes

Method: Draize Test

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE:

SULFURIC ACID:

Result: Corrosive to eyes

2-METHYL-4-ISOTHIAZOLIN-3-ONE:

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Product:

Remarks: May cause allergic skin reaction.

Components:

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE:


Germ cell mutagenicity

Not classified based on available information.

Components:

bronopol (INN):

Genotoxicity in vitro : Test Type: Ames test

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Result: negative

Carcinogenicity

Not classified based on available information.

IARC

Group 1: Carcinogenic to humans

sulphuric acid 7664-93-9

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

Known to be human carcinogen

sulphuric acid 7664-93-9

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

Components:

bronopol (INN):

Assessment: May cause respiratory irritation.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: No data available

Components:

SULFURIC ACID:

Remarks: Lung


SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC 50 (Pimephales promelas (fathead minnow)): 3.5 mg/l
Exposure time: 96 h

NOEC (Pimephales promelas (fathead minnow)): 1.8 mg/l

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Exposure time: 96 h

LC 50 (Cyprinodon variegatus (sheepshead minnow)): 26.7 mg/l

Exposure time: 96 h

NOEC (Cyprinodon variegatus (sheepshead minnow)): 15.5 mg/l

Exposure time: 96 h

LC 50 (Pimephales promelas (fathead minnow)): 5.36 mg/l

Exposure time: 96 h

Test Type: static test

Method: OECD Test Guideline 203

GLP: no

NOEC (Pimephales promelas (fathead minnow)): 5.0 mg/l

Exposure time: 96 h

Test Type: static test

Method: OECD Test Guideline 203

GLP: no

Toxicity to daphnia and other aquatic invertebrates : LC 50 (Ceriodaphnia dubia (water flea)): 4.7 mg/l
Exposure time: 48 h

NOEC (Ceriodaphnia dubia (water flea)): 0.63 mg/l

Exposure time: 48 h

LC 50 (Daphnia magna (Water flea)): 5 mg/l

Exposure time: 48 h

NOEC (Daphnia magna (Water flea)): 2.5 mg/l

Exposure time: 48 h

LC 50 (Daphnia magna (Water flea)): 4.67 mg/l

Exposure time: 48 h

Test Type: static test

Method: OECD Test Guideline 202

GLP: no

NOEC (Daphnia magna (Water flea)): 2.5 mg/l

Exposure time: 48 h


Test Type: static test

Method: OECD Test Guideline 202

GLP: no

Toxicity to fish (Chronic toxicity) : LC 50 (Pimephales promelas (fathead minnow)): 5.49 mg/l
Exposure time: 7.0 d
GLP: no

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : LC 50 (Ceriodaphnia dubia): 5.34 mg/l
Exposure time: 7.0 d
GLP: no

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Ecotoxicology Assessment

- Acute aquatic toxicity : Acute aquatic toxicity Category 2; Toxic to aquatic life.
- Chronic aquatic toxicity : Chronic aquatic toxicity Category 2; Toxic to aquatic life with long lasting effects.


Components:

bronopol (INN):

- Toxicity to fish : LC 50 (Oncorhynchus mykiss (rainbow trout)): 41.2 mg/l
Exposure time: 96 h
- LC 50 (Bluegill (Lepomis macrochirus)): 35.7 mg/l
Exposure time: 96 h
Test Type: flow-through test
- Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): 1.4 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
- Toxicity to algae : EC 50 (Pseudokirchneriella subcapitata (green algae)): 0.37 mg/l
End point: Growth inhibition
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
- EC 50 (Skeletonema costatum (diatom)): 0.25 mg/l
Exposure time: 72 h
Test Type: static test
Method: ISO 10253
- NOEC (Skeletonema costatum (diatom)): 0.1 mg/l
End point: Growth inhibition
Exposure time: 72 h
Test Type: static test
Method: ISO 10253
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Water flea (Daphnia magna)): 0.27 mg/l
Exposure time: 21 d
Test Type: flow-through test
Method: OECD Test Guideline 211

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE:

- Toxicity to fish : LC 50 (Oncorhynchus mykiss (rainbow trout)): 0.19 mg/l
Exposure time: 96 h
Test Type: flow-through test
Method: OECD Test Guideline 203
- LC 50 (Lepomis macrochirus (Bluegill sunfish)): 0.28 mg/l
Exposure time: 96 h

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- Toxicity to daphnia and other aquatic invertebrates : EC 50 (Daphnia magna (Water flea)): 0.16 mg/l
Exposure time: 48 h
- Toxicity to algae : EC 50 (Selenastrum capricornutum (green algae)): 0.018 mg/l
Exposure time: 72 h
- NOEC (Selenastrum capricornutum (green algae)): 0.0099 mg/l
Exposure time:
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.172 mg/l
End point: Reproduction Test
Exposure time: 21 d
- see user defined free text (Daphnia magna (Water flea)): 0.572 mg/l
End point: Reproduction Test
Exposure time: 21 d
- Toxicity to microorganisms : EC 50 (Bacteria): 5.7 mg/l
Exposure time: 16 h

SULFURIC ACID:

- Toxicity to fish : LC 50 (Lepomis macrochirus (Bluegill sunfish)): > 28 mg/l
Exposure time: 96 h
Method: Static
Remarks: Mortality
- LC 50 (Lepomis macrochirus (Bluegill sunfish)): 16 - 28 mg/l
Exposure time: 96 h
Method: Static
Remarks: Mortality
- Toxicity to daphnia and other aquatic invertebrates : EC 50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: Static
- Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h

2-METHYL-4-ISOTHIAZOLIN-3-ONE:

- Toxicity to fish : LC 50 (Oncorhynchus mykiss (rainbow trout)): 4.77 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): > 0.93 mg/l
Exposure time: 48 h
- Toxicity to algae : EC 50 (Selenastrum capricornutum (green algae)): 0.158 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

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Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.04 mg/l
Exposure time: 21 d

Persistence and degradability

Components:

bronopol (INN):

Biodegradability : Inoculum: activated sludge
Result: Readily biodegradable.
Biodegradation: 70 - 80 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

Chemical Oxygen Demand (COD) : 600 mg/g
Remarks: Chemical Oxygen Demand (COD)

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE:

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

Stability in water : Degradation half life: 17.3 h (25 °C)
Method: OECD Test Guideline 301B

SULFURIC ACID:

Biodegradability : Result: The methods for determining biodegradability are not applicable to inorganic substances.

2-METHYL-4-ISOTHIAZOLIN-3-ONE:

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

Stability in water : Degradation half life: 9.1 h (25 °C)
Method: OECD Test Guideline 301B

Bioaccumulative potential

Components:

bronopol (INN):


Partition coefficient: n-octanol/water : log Pow: 0.22 (24 °C)
pH: 7

Mobility in soil

No data available

Other adverse effects

Product:

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Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Components:

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE:

Additional ecological information : No data available

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

Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

| ID NUMBER | PROPER SHIPPING NAME | *HAZARD CLASS | SUBSIDIARY HAZARDS | PACKING GROUP | MARINE POLLUTANT / LTD. QTY. |
|-----------|----------------------|---------------|--------------------|---------------|------------------------------|
|-----------|----------------------|---------------|--------------------|---------------|------------------------------|

IATA-DGR

| | | | | |
|----|------|--|---|----|
| UN | 3265 | Corrosive liquid, acidic, organic, n.o.s. (5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE, 2-BROMO-2-NITRO-1,3-PROPANEDIOL, SULFURIC ACID) | 8 | II |
|----|------|--|---|----|

IMDG-Code

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 860502

| | | | | |
|----|------|--|---|----|
| UN | 3265 | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE, 2-BROMO-2-NITRO-1,3-PROPANEDIOL, SULFURIC ACID) | 8 | II |
|----|------|--|---|----|

CFR

| | | | | |
|----|------|--|---|----|
| UN | 3265 | Corrosive liquid, acidic, organic, n.o.s. (5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE, 2-BROMO-2-NITRO-1,3-PROPANEDIOL, SULFURIC ACID) | 8 | II |
|----|------|--|---|----|

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION
EPCRA - Emergency Planning and Community Right-to-Know Act
CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---------------|-----------|--------------------|-----------------------------|
| SULFURIC ACID | 7664-93-9 | 1000 | 104166 |

SARA 304 Extremely Hazardous Substances Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---------------|-----------|--------------------|-----------------------------|
| SULFURIC ACID | 7664-93-9 | 1000 | 104166 |


SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Corrosive to metals
 Serious eye damage or eye irritation
 Respiratory or skin sensitization
 Skin corrosion or irritation

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

MAGNESIUM NITRATE 10377-60-3 3.86 %
 ANHYDROUS

| | | |
|--|--|---------------------------|
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California Prop. 65

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

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

| | |
|-------|--|
| DSL | : All components of this product are on the Canadian DSL |
| AICS | : On the inventory, or in compliance with the inventory |
| ENCS | : Not in compliance with the inventory |
| KECI | : On the inventory, or in compliance with the inventory |
| PICCS | : On the inventory, or in compliance with the inventory |
| IECSC | : On the inventory, or in compliance with the inventory |
| TCSI | : On the inventory, or in compliance with the inventory |
| TSCA | : On the inventory, or in compliance with the inventory |

Biocides

EPA Reg. # 74655-38

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Danger, Corrosive., Causes irreversible eye damage., Causes skin burns., Harmful if swallowed or absorbed through the skin., Do not get in eyes, on skin or on clothing., Harmful if inhaled., Avoid breathing spray mist., Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.


SECTION 16. OTHER INFORMATION

Further information

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Full text of H-Statements

| | |
|------|--|
| H290 | : May be corrosive to metals. |
| H301 | : Toxic if swallowed. |
| H302 | : Harmful if swallowed. |
| H311 | : Toxic in contact with skin. |
| H312 | : Harmful in contact with skin. |
| H314 | : Causes severe skin burns and eye damage. |
| H315 | : Causes skin irritation. |
| H317 | : May cause an allergic skin reaction. |
| H318 | : Causes serious eye damage. |
| H330 | : Fatal if inhaled. |

| | | |
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H331 : Toxic if inhaled.
H335 : May cause respiratory irritation.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Eye Dam. : Serious eye damage
Met. Corr. : Corrosive to metals
Skin Corr. : Skin corrosion
Skin Irrit. : Skin irritation
Skin Sens. : Skin sensitisation
STOT SE : Specific target organ toxicity - single exposure

Further information

Other information : The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by the Solenis Environmental Health and Safety Department.

Sources of key data used to compile the Safety Data Sheet

Key literature references and sources of data


SOLENIS Internal data

SOLENIS internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; 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; HMIS - Hazardous Materials Identification System; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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

| | |
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- Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance 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

US / EN