

## Sulfadiazine / Trimethoprim Solid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2023/04/04
10.0	2023/09/30	1737632-00019	Date of first issue: 2017/06/08

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### 1. PRODUCT AND COMPANY IDENTIFICATION

Chemical product name : Sulfadiazine / Trimethoprim Solid Formulation

#### Supplier's company name, address and phone number

Company name of supplier : MSD

Address : Kumagaya, Saitama Prefecture , Xicheng 810 MSD Co., Ltd.  
Menuma factory

Telephone : 048-588-8411

E-mail address : EHSDATASTEWARD@msd.com

Emergency telephone number : +1-908-423-6000

#### Recommended use of the chemical and restrictions on use

Recommended use : Veterinary product

Restrictions on use : Not applicable

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### 2. HAZARDS IDENTIFICATION

#### GHS classification of chemical product

Skin corrosion/irritation : Category 2

Serious eye damage/eye irritation : Category 2B

Respiratory sensitisation : Category 1

Reproductive toxicity : Category 2

Specific target organ toxicity - single exposure : Category 3

Specific target organ toxicity - repeated exposure : Category 2 (Bone marrow)

Short-term (acute) aquatic hazard : Category 1


Long-term (chronic) aquatic hazard : Category 1

#### GHS label elements

## Sulfadiazine / Trimethoprim Solid Formulation

Version 10.0      Revision Date: 2023/09/30      SDS Number: 1737632-00019      Date of last issue: 2023/04/04  
Date of first issue: 2017/06/08

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- Hazard pictograms : 
- Signal word : Danger
- Hazard statements : H315 + H320 Causes skin and eye irritation.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 May cause respiratory irritation.  
H361d Suspected of damaging the unborn child.  
H373 May cause damage to organs (Bone marrow) through prolonged or repeated exposure.  
H410 Very toxic to aquatic life with long lasting effects.
- Precautionary statements : **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P260 Do not breathe dust.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P284 Wear respiratory protection.
- Response:**  
P302 + P352 IF ON SKIN: Wash with plenty of water.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.  
P362 + P364 Take off contaminated clothing and wash it before reuse.  
P391 Collect spillage.
- Storage:**  
P405 Store locked up.
- Disposal:**  
P501 Dispose of contents/ container to an approved waste

## Sulfadiazine / Trimethoprim Solid Formulation

Version 10.0      Revision Date: 2023/09/30      SDS Number: 1737632-00019      Date of last issue: 2023/04/04  
 Date of first issue: 2017/06/08

disposal plant.

**Other hazards which do not result in classification**

Important symptoms and out- : May form explosive dust-air mixture during processing, han-  
 lines of the emergency as- dling or other means.  
 sumed

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Components**

Chemical name	CAS-No.	Concentration (% w/w)	ENCS No.
Calcium carbonate	471-34-1	60	1-122
sulfadiazine	68-35-9	33.34	
Trimethoprim	738-70-5	6.66	

**4. FIRST AID MEASURES**

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
 When symptoms persist or in all cases of doubt seek medical advice.
- If inhaled : If inhaled, remove to fresh air.  
 If not breathing, give artificial respiration.  
 If breathing is difficult, give oxygen.  
 Get medical attention.
- In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.  
 Get medical attention.  
 Wash clothing before reuse.  
 Thoroughly clean shoes before reuse.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.  
 If easy to do, remove contact lens, if worn.  
 Get medical attention.
- If swallowed : If swallowed, DO NOT induce vomiting.  
 Get medical attention.  
 Rinse mouth thoroughly with water.
- Most important symptoms and effects, both acute and delayed : Causes skin and eye irritation.  
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 May cause respiratory irritation.  
 Suspected of damaging the unborn child.  
 May cause damage to organs through prolonged or repeated exposure.  
 Excessive exposure may aggravate preexisting asthma and

## Sulfadiazine / Trimethoprim Solid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2023/04/04
10.0	2023/09/30	1737632-00019	Date of first issue: 2017/06/08

---

other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome).

Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

Notes to physician : Treat symptomatically and supportively.

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**5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical

Unsuitable extinguishing media : None known.

Specific hazards during fire-fighting : Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.  
Exposure to combustion products may be a hazard to health.

Hazardous combustion products : Carbon oxides  
Metal oxides

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.  
Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

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**6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

Environmental precautions : Avoid release to the environment.  
Prevent further leakage or spillage if safe to do so.  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Surround spill with absorbents and place a damp covering over the area to minimise entry of the material into the air.  
Add excess liquid to allow the material to enter into solution.  
Soak up with inert absorbent material.  
Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).  
Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

## Sulfadiazine / Trimethoprim Solid Formulation

Version 10.0	Revision Date: 2023/09/30	SDS Number: 1737632-00019	Date of last issue: 2023/04/04 Date of first issue: 2017/06/08
-----------------	------------------------------	------------------------------	---

Clean up remaining materials from spill with suitable absorbent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

### 7. HANDLING AND STORAGE

#### Handling

- |                         |   |  |
|-------------------------|---|--|
| Technical measures      | : | <p>Static electricity may accumulate and ignite suspended dust causing an explosion.<br/>Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.</p>   |
| Local/Total ventilation | : | <p>If sufficient ventilation is unavailable, use with local exhaust ventilation.</p>   |
| Advice on safe handling | : | <p>Do not get on skin or clothing.<br/>Do not breathe dust.<br/>Do not swallow.<br/>Do not get in eyes.<br/>Wash skin thoroughly after handling.<br/>Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment<br/>Keep container tightly closed.<br/>Already sensitised individuals, and those susceptible to asthma, allergies, chronic or recurrent respiratory disease, should consult their physician regarding working with respiratory irritants or sensitisers.<br/>Minimize dust generation and accumulation.<br/>Keep container closed when not in use.<br/>Keep away from heat and sources of ignition.<br/>Take precautionary measures against static discharges.<br/>Do not eat, drink or smoke when using this product.<br/>Take care to prevent spills, waste and minimize release to the environment.</p> |
| Avoidance of contact    | : | <p>Oxidizing agents</p>  |
| Hygiene measures        | : | <p>If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.<br/>When using do not eat, drink or smoke.<br/>Wash contaminated clothing before re-use.<br/>The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.</p>   |

## Sulfadiazine / Trimethoprim Solid Formulation

Version 10.0      Revision Date: 2023/09/30      SDS Number: 1737632-00019      Date of last issue: 2023/04/04  
 Date of first issue: 2017/06/08

**Storage**

- Conditions for safe storage : Keep in properly labelled containers.  
 Store locked up.  
 Keep tightly closed.  
 Keep in a cool, well-ventilated place.  
 Store in accordance with the particular national regulations.
- Materials to avoid : Do not store with the following product types:  
 Strong oxidizing agents
- Packaging material : Unsuitable material: None known.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Threshold limit value and permissible exposure limits for each component in the work environment**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Reference concentration / Permissible concentration	Basis
Calcium carbonate	471-34-1	OEL-M (Respirable dust)	2 mg/m <sup>3</sup>	JP OEL JSOH
		OEL-M (Total dust)	8 mg/m <sup>3</sup>	JP OEL JSOH
sulfadiazine	68-35-9	TWA	2 mg/m <sup>3</sup> (OEB 1)	Internal
Trimethoprim	738-70-5	TWA	400 µg/m <sup>3</sup> (OEB 2)	Internal

- Engineering measures** : Use feasible engineering controls to minimize exposure to compound.  
 All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.

**Personal protective equipment**

- Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.
- Filter type : Particulates type
- Hand protection : Chemical-resistant gloves
- Eye protection : Wear safety glasses with side shields or goggles.  
 If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles.  
 Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.
- Skin and body protection : Work uniform or laboratory coat.

**Sulfadiazine / Trimethoprim Solid Formulation**

Version	Revision Date:	SDS Number:	Date of last issue: 2023/04/04
10.0	2023/09/30	1737632-00019	Date of first issue: 2017/06/08

---

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state	:	powder
Colour	:	light yellow
Odour	:	No data available
Odour Threshold	:	No data available
Melting point/freezing point	:	No data available
Boiling point, initial boiling point and boiling range	:	No data available
Flammability (solid, gas)	:	May form explosive dust-air mixture during processing, handling or other means.
Flammability (liquids)	:	No data available
Lower explosion limit and upper explosion limit / flammability limit	:	
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	No data available
Decomposition temperature	:	No data available
pH	:	No data available
Evaporation rate	:	Not applicable
Auto-ignition temperature	:	No data available
Viscosity	:	
Viscosity, kinematic	:	Not applicable
Solubility(ies)	:	
Water solubility	:	No data available
Partition coefficient: n-octanol/water	:	Not applicable
Vapour pressure	:	Not applicable
Density and / or relative density	:	
Relative density	:	No data available
Density	:	No data available

**Sulfadiazine / Trimethoprim Solid Formulation**

Version	Revision Date:	SDS Number:	Date of last issue: 2023/04/04
10.0	2023/09/30	1737632-00019	Date of first issue: 2017/06/08

---

Relative vapour density : Not applicable

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Particle characteristics  
Particle size : No data available

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**10. STABILITY AND REACTIVITY**

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : May form explosive dust-air mixture during processing, handling or other means.  
Can react with strong oxidizing agents.

Conditions to avoid : Heat, flames and sparks.  
Avoid dust formation.

Incompatible materials : Oxidizing agents

Hazardous decomposition products : No hazardous decomposition products are known.

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**11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure : Inhalation  
Skin contact  
Ingestion  
Eye contact

**Acute toxicity**

Not classified based on available information.

**Product:**

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation method

**Components:****Calcium carbonate:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 420  
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat): > 3 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

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## Sulfadiazine / Trimethoprim Solid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2023/04/04
10.0	2023/09/30	1737632-00019	Date of first issue: 2017/06/08

	Method: OECD Test Guideline 403
	Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	: LD50 (Rat): > 2,000 mg/kg
	Method: OECD Test Guideline 402
	Assessment: The substance or mixture has no acute dermal toxicity

**sulfadiazine:**

Acute oral toxicity	: LD50 (Mouse): 1,500 mg/kg
Acute dermal toxicity	: LD50 (Rat): > 5,000 mg/kg
	Remarks: Based on data from similar materials
Acute toxicity (other routes of administration)	: LD50 (Rat): 880 mg/kg
	Application Route: Intravenous
	LD50 (Mouse): 180 mg/kg
	Application Route: Intravenous

**Trimethoprim:**

Acute oral toxicity	: LD50 (Rat): 1,500 - 5,300 mg/kg
	LD50 (Mouse): 1,910 - 7,000 mg/kg
Acute toxicity (other routes of administration)	: LD50 (Rat): 400 - 500 mg/kg
	Application Route: Intraperitoneal
	LD50 (Dog): 90 mg/kg
	Application Route: Intravenous
	LD50 (Mouse): 132 mg/kg
	Application Route: Intravenous

**Skin corrosion/irritation**

Causes skin irritation.

**Components:****Calcium carbonate:**

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

**sulfadiazine:**

Result	: Skin irritation
Remarks	: Based on data from similar materials

**Sulfadiazine / Trimethoprim Solid Formulation**

Version 10.0      Revision Date: 2023/09/30      SDS Number: 1737632-00019      Date of last issue: 2023/04/04  
Date of first issue: 2017/06/08

---

**Serious eye damage/eye irritation**

Causes eye irritation.

**Components:****Calcium carbonate:**

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

**sulfadiazine:**

Species	:	Rabbit
Result	:	Irritation to eyes, reversing within 7 days
Remarks	:	Based on data from similar materials

**Respiratory or skin sensitisation****Skin sensitisation**

Not classified based on available information.

**Respiratory sensitisation**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Components:****Calcium carbonate:**

Test Type	:	Local lymph node assay (LLNA)
Exposure routes	:	Skin contact
Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	negative

**sulfadiazine:**

Test Type	:	Maximisation Test
Species	:	Guinea pig
Result	:	Not a skin sensitizer.
Remarks	:	Based on data from similar materials

**Trimethoprim:**

Test Type	:	Maximisation Test
Exposure routes	:	Dermal
Species	:	Guinea pig
Result	:	Not a skin sensitizer.

**Germ cell mutagenicity**

Not classified based on available information.

**Components:****Calcium carbonate:**

**Sulfadiazine / Trimethoprim Solid Formulation**

Version 10.0      Revision Date: 2023/09/30      SDS Number: 1737632-00019      Date of last issue: 2023/04/04  
Date of first issue: 2017/06/08

---

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473  
Result: negative

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

**sulfadiazine:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on data from similar materials

Test Type: Chromosomal aberration  
Test system: Chinese hamster ovary cells  
Result: negative  
Remarks: Based on data from similar materials

**Trimethoprim:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative

Test Type: Chromosomal aberration  
Result: negative

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

Test Type: DNA damage and repair, unscheduled DNA synthesis in mammalian cells (in vitro)  
Result: negative

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

Test Type: Chromosomal aberration  
Species: Humans  
Result: negative

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Suspected of damaging the unborn child.

## Sulfadiazine / Trimethoprim Solid Formulation

Version 10.0      Revision Date: 2023/09/30      SDS Number: 1737632-00019      Date of last issue: 2023/04/04  
 Date of first issue: 2017/06/08

**Components:****Calcium carbonate:**

Effects on fertility : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test  
 Species: Rat  
 Application Route: Ingestion  
 Method: OECD Test Guideline 422  
 Result: negative

Effects on foetal development : Test Type: Embryo-foetal development  
 Species: Rat  
 Application Route: Ingestion  
 Method: OECD Test Guideline 414  
 Result: negative

**sulfadiazine:**

Effects on foetal development : Test Type: Development  
 Species: Mouse  
 Application Route: Oral  
 General Toxicity Maternal: NOAEL: 1,000 mg/kg body weight  
 Result: Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses

**Trimethoprim:**

Effects on fertility : Test Type: Fertility  
 Species: Rat  
 Application Route: Oral  
 Fertility: NOAEL: 70 mg/kg body weight  
 Result: No effects on fertility

Effects on foetal development : Test Type: Development  
 Species: Rat  
 Application Route: Oral  
 Developmental Toxicity: LOAEL: 70 mg/kg body weight  
 Result: Effects on newborn  
 Remarks: Maternal toxicity observed.

Test Type: Development  
 Species: Rat  
 Application Route: Oral  
 Developmental Toxicity: LOAEL: 70 mg/kg body weight  
 Result: Embryotoxic effects.  
 Remarks: Maternal toxicity observed.

Test Type: Development  
 Species: Rat  
 Application Route: Oral  
 Developmental Toxicity: LOAEL: 15 mg/kg body weight  
 Result: Embryotoxic effects., Teratogenic effects

## Sulfadiazine / Trimethoprim Solid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2023/04/04
10.0	2023/09/30	1737632-00019	Date of first issue: 2017/06/08

---

Test Type: Development  
 Species: Hamster  
 Application Route: Oral  
 Developmental Toxicity: LOAEL: 1.7 mg/kg body weight  
 Result: Embryotoxic effects., No teratogenic effects

Test Type: Development  
 Species: Rabbit  
 Application Route: Oral  
 Developmental Toxicity: LOAEL: 100 mg/kg body weight  
 Result: Embryotoxic effects., No teratogenic effects

Reproductive toxicity - Assessment : Suspected of damaging the unborn child.

**STOT - single exposure**

May cause respiratory irritation.

**Components:****sulfadiazine:**

Assessment : May cause respiratory irritation.

**STOT - repeated exposure**

May cause damage to organs (Bone marrow) through prolonged or repeated exposure.

**Components:****Trimethoprim:**

Target Organs : Bone marrow  
 Assessment : Causes damage to organs through prolonged or repeated exposure.

**Repeated dose toxicity****Components:****Calcium carbonate:**

Species : Rat  
 NOAEL : > 1,000 mg/kg  
 Application Route : Ingestion  
 Exposure time : 28 Days  
 Method : OECD Test Guideline 422

**Trimethoprim:**

Species : Rat  
 NOAEL : 100 mg/kg  
 LOAEL : 300 mg/kg  
 Application Route : Oral  
 Exposure time : 6 Months  
 Target Organs : Bone marrow, Liver, Pituitary gland, Thyroid

## Sulfadiazine / Trimethoprim Solid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2023/04/04
10.0	2023/09/30	1737632-00019	Date of first issue: 2017/06/08

---

Species	: Rat
LOAEL	: 300 mg/kg
Application Route	: Oral
Exposure time	: 3 Months
Target Organs	: Bone marrow

Species	: Dog
NOAEL	: 2.5 mg/kg
LOAEL	: 45 mg/kg
Application Route	: Oral
Exposure time	: 3 Months
Target Organs	: Blood, Thyroid

**Aspiration toxicity**

Not classified based on available information.

**Experience with human exposure****Components:****sulfadiazine:**

General Information	: May cause eye, skin, and respiratory tract irritation.
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**Trimethoprim:**

Ingestion	: Target Organs: Bone marrow Symptoms: Abdominal pain, Nausea, Vomiting, skin rash, Dizziness, Headache, mental depression, confusion
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**12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****Calcium carbonate:**

Toxicity to fish	: LL50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EL50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	: NOELR (Pseudokirchneriella subcapitata (green algae)): 50 mg/l Exposure time: 72 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 201

## Sulfadiazine / Trimethoprim Solid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2023/04/04
10.0	2023/09/30	1737632-00019	Date of first issue: 2017/06/08

		EL50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 201
Toxicity to microorganisms	:	NOEC: 1,000 mg/l Exposure time: 3 h Method: OECD Test Guideline 209
		EC50: > 1,000 mg/l Exposure time: 3 h Method: OECD Test Guideline 209
<b>sulfadiazine:</b>		
Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): > 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	:	EC50 (Anabaena flos-aquae): 17 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
		NOEC (Anabaena flos-aquae): 3.9 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
		EC50 (Pseudokirchneriella subcapitata (green algae)): > 1 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
		NOEC (Pseudokirchneriella subcapitata (green algae)): 0.13 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
		EC50 (Microcystis aeruginosa (blue-green algae)): 0.135 mg/l Exposure time: 7 Days Method: ISO 8692
M-Factor (Acute aquatic toxicity)	:	1
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 6.2 mg/l Exposure time: 21 d Method: OECD Test Guideline 211

## Sulfadiazine / Trimethoprim Solid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2023/04/04
10.0	2023/09/30	1737632-00019	Date of first issue: 2017/06/08

M-Factor (Chronic aquatic toxicity)	:	1
Toxicity to microorganisms	:	EC50: > 1,000 mg/l Exposure time: 3 h Test Type: Respiration inhibition Method: OECD Test Guideline 209
		NOEC: 1,000 mg/l Exposure time: 3 h Test Type: Respiration inhibition Method: OECD Test Guideline 209

**Trimethoprim:**

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna Straus): 92 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (microalgae)): 80.3 mg/l Exposure time: 72 h
		NOEC (Pseudokirchneriella subcapitata (green algae)): 16 mg/l Exposure time: 72 h
		EC50 (Anabaena flos-aquae): 253 mg/l Exposure time: 72 h
		EC10 (Anabaena flos-aquae): 26 mg/l Exposure time: 72 h
Toxicity to fish (Chronic toxicity)	:	NOEC (Zebrafish): 0.157 mg/l Exposure time: 21 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 6 mg/l Exposure time: 21 d
Toxicity to microorganisms	:	EC10: 16.7 mg/l Exposure time: 3 hrs Test Type: Respiration inhibition Method: OECD Test Guideline 209
		EC50: > 1,000 mg/l Exposure time: 3 hrs Test Type: Respiration inhibition Method: OECD Test Guideline 209



## Sulfadiazine / Trimethoprim Solid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2023/04/04
10.0	2023/09/30	1737632-00019	Date of first issue: 2017/06/08

---

**Persistence and degradability****Components:****sulfadiazine:**

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 0 % Exposure time: 28 d Method: OECD Test Guideline 314
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**Trimethoprim:**

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 4 % Exposure time: 28 d Method: OECD Test Guideline 301D
		Result: Not inherently biodegradable. Biodegradation: 0 % Exposure time: 28 d Method: OECD Test Guideline 302B

**Bioaccumulative potential****Components:****sulfadiazine:**

Partition coefficient: n-octanol/water	:	log Pow: 0.12
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**Trimethoprim:**

Partition coefficient: n-octanol/water	:	log Pow: 0.91
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**Mobility in soil**

No data available

**Hazardous to the ozone layer**

Not applicable

**Other adverse effects**

No data available

**13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues	:	Dispose of in accordance with local regulations. Do not dispose of waste into sewer.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product.

**Sulfadiazine / Trimethoprim Solid Formulation**

Version 10.0      Revision Date: 2023/09/30      SDS Number: 1737632-00019      Date of last issue: 2023/04/04  
Date of first issue: 2017/06/08

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**14. TRANSPORT INFORMATION****International Regulations****UNRTDG**

UN number : UN 3077  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,  
N.O.S.  
(sulfadiazine)  
Class : 9  
Packing group : III  
Labels : 9  
Environmentally hazardous : yes

**IATA-DGR**

UN/ID No. : UN 3077  
Proper shipping name : Environmentally hazardous substance, solid, n.o.s.  
(sulfadiazine)  
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.  
(sulfadiazine)  
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.

**National Regulations**

Refer to section 15 for specific national regulation.

**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.

**ERG Code** : 171

## Sulfadiazine / Trimethoprim Solid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2023/04/04
10.0	2023/09/30	1737632-00019	Date of first issue: 2017/06/08

## 15. REGULATORY INFORMATION

**Related Regulations****Fire Service Law**

Not applicable to dangerous materials / designated flammables.

**Chemical Substance Control Law**

Not applicable for Specified Chemical Substance, Monitoring Chemical Substance and Priority Assessment Chemical Substance.

**Industrial Safety and Health Law****Harmful Substances Prohibited from Manufacture**

Not applicable

**Harmful Substances Required Permission for Manufacture**

Not applicable

**Substances Prevented From Impairment of Health**

Not applicable

**Circular concerning Information on Chemicals having Mutagenicity - Annex 2: Information on Existing Chemicals having Mutagenicity**

Not applicable

**Circular concerning Information on Chemicals having Mutagenicity - Annex 1: Information on Notified Substances having Mutagenicity**

Not applicable

**Substances Subject to be Notified Names**

Article 57-2 (Enforcement Order Table 9)

Chemical name	Concentration (%)	Remarks
5-[(3,4,5-trimethoxyphenyl)methyl]pyrimidine-2,4-diamine	>=1 - <10	From April 1st, 2024

**Substances Subject to be Indicated Names**

Article 57 (Enforcement Order Article 18)

Chemical name	Remarks
5-[(3,4,5-trimethoxyphenyl)methyl]pyrimidine-2,4-diamine	From April 1st, 2024

**Ordinance on Prevention of Hazards Due to Specified Chemical Substances**

Not applicable

**Ordinance on Prevention of Lead Poisoning**

Not applicable

**Ordinance on Prevention of Tetraalkyl Lead Poisoning**

Not applicable

**Ordinance on Prevention of Organic Solvent Poisoning**

Not applicable

**Sulfadiazine / Trimethoprim Solid Formulation**

Version 10.0      Revision Date: 2023/09/30      SDS Number: 1737632-00019      Date of last issue: 2023/04/04  
Date of first issue: 2017/06/08

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**Enforcement Order of the Industrial Safety and Health Law - Attached table 1 (Dangerous Substances)**

Not applicable

**Poisonous and Deleterious Substances Control Law**

Not applicable

**Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof**

|| Not applicable

**High Pressure Gas Safety Act**

Not applicable

**Explosive Control Law**

Not applicable

**Vessel Safety Law**

Miscellaneous dangerous substances and articles (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)

**Aviation Law**

Miscellaneous dangerous substances and articles (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)

**Marine Pollution and Sea Disaster Prevention etc Law**

Bulk transportation                      : Not classified as noxious liquid substance

Pack transportation                      : Classified as marine pollutant

**Narcotics and Psychotropics Control Act**

Narcotic or Psychotropic Raw Material (Export / Import Permission)

Not applicable

Specific Narcotic or Psychotropic Raw Material (Export / Import permission)

Not applicable

**Waste Disposal and Public Cleansing Law**

Industrial waste

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

AICS    : not determined

DSL    : not determined

IECSC    : not determined

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**16. OTHER INFORMATION****Further information**

Sources of key data used to      : Internal technical data, data from raw material SDSs, OECD

## Sulfadiazine / Trimethoprim Solid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2023/04/04
10.0	2023/09/30	1737632-00019	Date of first issue: 2017/06/08

---

compile the Safety Data Sheet

eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Date format : yyyy/mm/dd

**Full text of other abbreviations**

JP OEL JSOH : Japan. The Japan Society for Occupational Health. Recommendation of Occupational Exposure Limits

JP OEL JSOH / OEL-M : Occupational Exposure Limit-Mean

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, 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; TECl - 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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their

**Sulfadiazine / Trimethoprim Solid Formulation**

Version	Revision Date:	SDS Number:	Date of last issue: 2023/04/04
10.0	2023/09/30	1737632-00019	Date of first issue: 2017/06/08

---

intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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