

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Version: 1.5

Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

**SECTION 1. IDENTIFICATION**

**Product identifier**

Trade name : Biosperse™ CN5500  
 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

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

**SECTION 2. HAZARDS IDENTIFICATION**

**GHS classification in accordance with 29 CFR 1910.1200**

- Acute toxicity (Oral) : Category 3
- Acute toxicity (Inhalation) : Category 2
- Skin corrosion : Category 1B
- Serious eye damage : Category 1
- Respiratory sensitisation : Category 1
- Skin sensitisation : Category 1
- Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

**GHS label elements**

Hazard pictograms : 

Signal word : Danger

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Version: 1.5

Biosperse™ CN5500 MICROBIOCIDES  
™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries  
857829

**Hazard statements** : H301 Toxic if swallowed.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H330 Fatal if inhaled.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 May cause respiratory irritation.

**Precautionary statements** : **Prevention:**  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P284 Wear respiratory protection.

**Response:**

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.  
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.  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.  
P363 Wash contaminated clothing before reuse.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

**Disposal:**

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

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Version: 1.5

Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

Substance / Mixture : Mixture

**Hazardous components**

Chemical name	CAS-No.	Classification	Concentration (%)
GLUTARALDEHYDE	111-30-8	Acute Tox. 3; H301 Acute Tox. 2; H330 Skin Corr. 1B; H314 Eye Dam. 1; H318 Resp. Sens. 1; H334 Skin Sens. 1A; H317 STOT SE 3; H335	>= 50 - < 60
METHANOL	67-56-1	Flam. Liq. 2; H225 Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 STOT SE 1; H370	>= 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.  
 Symptoms of poisoning may appear several hours later.  
 Do not leave the victim unattended.
- If inhaled : Move to fresh air.  
 Call a physician or poison control centre immediately.  
 Keep patient warm and at rest.  
 If unconscious, place in recovery position and seek medical advice.
- 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.

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Biosperse™ CN5500 MICROBIOCIDE  
™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries  
857829

Version: 1.5

- Most important symptoms and effects, both acute and delayed : Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
stomach or intestinal upset (nausea, vomiting, diarrhea)  
irritation (nose, throat, airways)  
Headache  
Toxic if swallowed.  
May cause an allergic skin reaction.  
Causes serious eye damage.  
Fatal if inhaled.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause respiratory irritation.  
Causes severe burns.
- Notes to physician : Probable mucosal damage may contraindicate the use of gastric lavage.

**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 : If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release.  
Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon monoxide  
Carbon dioxide (CO2)
- 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**

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Version: 1.5

Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

- Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.  
 Use personal protective equipment.  
 Ensure adequate ventilation.  
 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 containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, 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 : Avoid formation of aerosol.  
 Provide sufficient air exchange and/or exhaust in work rooms.  
 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.  
 Prevent unauthorized access.  
 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	Control	Basis
------------	---------	------------	---------	-------

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

 Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

Version: 1.5

		(Form of exposure)	parameters / Permissible concentration	
GLUTARALDEHYDE	111-30-8	C	0.2 ppm 0.8 mg/m3	NIOSH REL
		C	0.2 ppm 0.8 mg/m3	OSHA P0
		C	0.05 ppm	ACGIH
METHANOL	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m3	NIOSH REL
		ST	250 ppm 325 mg/m3	NIOSH REL
		TWA	200 ppm 260 mg/m3	OSHA Z-1
		STEL	250 ppm 325 mg/m3	OSHA P0
		TWA	200 ppm 260 mg/m3	OSHA P0

**Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
METHANOL		Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI

**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.

**Personal protective equipment**

**Respiratory protection** : In the case of vapour formation use a respirator with an approved filter.

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Version: 1.5

Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

**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 : Avoid contact with skin, eyes and clothing.  
 Wash hands before breaks and immediately after handling the product.  
 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 : liquid

Colour : light yellow, colourless

Odour : pungent, characteristic

Odour Threshold : No data available  
 No data available

pH : 3.1 - 4.5

Melting point/freezing point : -18 °C

Boiling point/boiling range : 100.7 °C

Flash point : 99.99 °C

Evaporation rate : < 1.00  
 Ethyl Ether

Flammability (solid, gas) : No data available

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Version: 1.5

 Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

No data available

Self-ignition	:	> 437.0 °F
Upper explosion limit	:	No data available
		No data available
Lower explosion limit	:	No data available
		No data available
Vapour pressure	:	0.3 mmHg (20 °C)
Relative vapour density	:	1.1 (Air = 1.0)
Relative density	:	1.129 (20 °C) No data available
Density	:	No data available
Solubility(ies)		
Water solubility	:	soluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	15.4 mPa.s (25 °C)
Viscosity, kinematic	:	20.3 mm <sup>2</sup> /s (20 °C)
Oxidizing properties	:	No data available
		No data available

---

**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
Incompatible materials	:	aluminum

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Version: 1.5

Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

- Amines
- Ammonia
- Carbon steel
- Copper
- Iron
- Mild steel
- Strong acids
- strong alkalis
- Strong oxidizing agents

Hazardous decomposition products : **Carbon monoxide**  
**Carbon dioxide (CO<sub>2</sub>)**

**SECTION 11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

Toxic if swallowed.  
 Fatal if inhaled.

**Product:**

Acute oral toxicity : Remarks: Toxic if swallowed.

Acute toxicity estimate: 198.02 mg/kg  
 Method: Calculation method

Acute inhalation toxicity : Remarks: Toxic by inhalation.  
 Severe respiratory irritant

Acute toxicity estimate: 0.28 mg/l  
 Exposure time: 4 h  
 Test atmosphere: dust/mist  
 Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: 4,615 mg/kg  
 Method: Calculation method

**Components:**

**GLUTARALDEHYDE:**

Acute oral toxicity : LD 50 (Rat, male and female): 100 mg/kg  
 Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 0.14 mg/l  
 Exposure time: 4 h  
 Test atmosphere: dust/mist  
 Method: OECD Test Guideline 403  
 Remarks: see user defined free text

Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Biosperse™ CN5500 MICROBIOCIDE  
™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries  
857829

Version: 1.5

**METHANOL:**

Acute oral toxicity : LD L0 (Human): 300 mg/kg  
Assessment: The component/mixture is classified as acute oral toxicity, category 3.

Acute inhalation toxicity : LC 50 (Rat): > 87.6 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Remarks: Toxic by inhalation

Acute dermal toxicity : LD 50 (Rabbit): 12,800 mg/kg  
Assessment: The component/mixture is classified as acute dermal toxicity, category 3.

**Skin corrosion/irritation**

Causes severe burns.

**Product:**

Result: Corrosive to skin

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

**Components:****GLUTARALDEHYDE:**

Result: Corrosive after 3 minutes to 1 hour of exposure

**METHANOL:**

Species: Rabbit

Result: Not irritating to skin

**Serious eye damage/eye irritation**

Causes serious eye damage.

**Product:**

Result: Corrosive to eyes

Remarks: May cause irreversible eye damage.

**Components:****GLUTARALDEHYDE:**

Result: Corrosive to eyes

**METHANOL:**

Species: Rabbit

Result: Mildly irritating to eyes

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 00000255223

Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

Version: 1.5

**Respiratory or skin sensitisation**

**Skin sensitisation**

May cause an allergic skin reaction.

**Respiratory sensitisation**

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

**Product:**

Remarks: May cause allergic skin reaction.

**Components:**

**GLUTARALDEHYDE:**

Result: May cause sensitisation by inhalation.

Result: The product is a skin sensitiser, sub-category 1A.

**METHANOL:**

Test Type: Maximisation Test  
 Species: Guinea pig  
 Method: OECD Test Guideline 406

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**IARC** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

May cause respiratory irritation.

**Components:**

**GLUTARALDEHYDE:**

Assessment: May cause respiratory irritation.

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Version: 1.5

Biosperse™ CN5500 MICROBIOCIDE  
™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries  
857829

Remarks: see user defined free text

**METHANOL:**

Exposure routes: inhalation (vapour)

Target Organs: Central nervous system, Eyes

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

Exposure routes: Skin contact

Target Organs: Central nervous system, Eyes

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

Exposure routes: Ingestion

Target Organs: Central nervous system, Eyes

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

**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:****METHANOL:**

Remarks: Central nervous system

---

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Toxicity to fish : LC 50 (Ide, silver or golden orfe (Leuciscus idus)): 10 - 100 mg/l  
Exposure time: 96 h  
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): 10 - 100 mg/l  
Exposure time: 48 h  
Test Type: static test

**Ecotoxicology Assessment**

Acute aquatic toxicity : Acute aquatic toxicity Category 2; Toxic to aquatic life.

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

Version: 1.5

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

**Components:**

**GLUTARALDEHYDE:**

Toxicity to fish : LC 50 (Lepomis macrochirus (Bluegill sunfish)): 13 mg/l  
 Exposure time: 96 h  
 Test Type: static test

LC 50 (Oncorhynchus mykiss (rainbow trout)): 10 mg/l  
 Exposure time: 96 h  
 Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): 14.87 mg/l  
 Exposure time: 48 h  
 Test Type: static test

Toxicity to algae : NOEC (Desmodesmus subspicatus (green algae)): 0.025 mg/l  
 End point: Growth inhibition  
 Exposure time: 72 h  
 Test Type: static test

EC 50 (Desmodesmus subspicatus (green algae)): 0.6 mg/l  
 End point: Biomass  
 Exposure time: 72 h  
 Test Type: static test

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 1.6 mg/l  
 Exposure time: 97 d  
 Test Type: flow-through test  
 Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Water flea (Daphnia magna)): 5 mg/l  
 Exposure time: 21 d  
 Test Type: semi-static test

**METHANOL:**

Toxicity to fish : LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss)): 18,000 - 20,000 mg/l  
 Exposure time: 96 h  
 Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): > 10,000 mg/l  
 Exposure time: 48 h  
 Test Type: static test

**Persistence and degradability**

**Product:**

Biochemical Oxygen : Biochemical oxygen demand within 5 days

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Version: 1.5

Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

Demand (BOD) 235 mg/g  
 Chemical Oxygen Demand : 1,385 mg/g  
 (COD) Method: Chemical oxygen demand

**Components:**

**GLUTARALDEHYDE:**

Biodegradability : Inoculum: activated sludge  
 Result: Readily biodegradable.  
 Biodegradation: 90 - 100 %  
 Exposure time: 28 d  
 Method: OECD Test Guideline 301A

**METHANOL:**

Biodegradability : Biodegradation: 99 %  
 Exposure time: 28 d  
 Method: OECD Test Guideline 301D

**Bioaccumulative potential**

**Components:**

**GLUTARALDEHYDE:**

Partition coefficient: n-octanol/water : log Pow: -0.36 (23 °C)

**METHANOL:**

Partition coefficient: n-octanol/water : log Pow: -0.77

**Mobility in soil**

No data available

**Other adverse effects**

**Product:**

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

---

**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.

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Version: 1.5

Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

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.
-----------	----------------------	---------------	--------------------	---------------	------------------------------

**U.S. DOT - ROAD**

UN 2922	Corrosive liquids, toxic, n.o.s. (GLUTARALDEHYDE)	8	(6.1)	II	
---------	---	---	-------	----	--

**U.S. DOT - RAIL**

UN 2922	Corrosive liquids, toxic, n.o.s. (GLUTARALDEHYDE)	8	(6.1)	II	
---------	---	---	-------	----	--

**U.S. DOT - INLAND WATERWAYS**

UN 2922	Corrosive liquids, toxic, n.o.s. (GLUTARALDEHYDE)	8	(6.1)	II	
---------	---	---	-------	----	--

**TRANSPORT CANADA - ROAD**

UN 2922	CORROSIVE LIQUID, TOXIC, N.O.S. (GLUTARALDEHYDE)	8	(6.1)	II	
---------	--	---	-------	----	--

**TRANSPORT CANADA - RAIL**

UN 2922	CORROSIVE LIQUID, TOXIC, N.O.S. (GLUTARALDEHYDE)	8	(6.1)	II	
---------	--	---	-------	----	--

**INTERNATIONAL MARITIME DANGEROUS GOODS**

UN 2922	CORROSIVE LIQUID, TOXIC, N.O.S. (GLUTARALDEHYDE)	8	(6.1)	II	
---------	--	---	-------	----	--

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

UN 2922	Corrosive liquid, toxic, n.o.s. (GLUTARALDEHYDE)	8	(6.1)	II	
---------	--	---	-------	----	--

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Version: 1.5

Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

UN	2922	Corrosive liquid, toxic, n.o.s. (GLUTARALDEHYDE)	8	(6.1)	II
----	------	---	---	-------	----

**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

UN	2922	LIQUIDO CORROSIVO, TOXICO, N.E.P. (GLUTARALDEHYDE)	8	(6.1)	II
----	------	--	---	-------	----

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

Marine pollutant	yes
------------------	-----

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**

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**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** :
- Acute toxicity (any route of exposure)
  - Skin corrosion or irritation
  - Serious eye damage or eye irritation
  - Respiratory or skin sensitization
  - Specific target organ toxicity (single or repeated exposure)

- SARA 313** :
- This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**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

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

Version: 1.5

- ENCS : On the inventory, or 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 TSCA Inventory

**Biocides**

74655-31

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 inhaled., May be fatal if swallowed., Harmful if absorbed through skin., Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals., Causes asthmatic signs and symptoms in hyper-reactive individuals., Do not get in eyes, on skin or on clothing., Avoid breathing vapor., Do not swallow.

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

---

**SECTION 16. OTHER INFORMATION**

**Further information**

Revision Date: 04/17/2018

**Full text of H-Statements**

- H225 : Highly flammable liquid and vapour.
- H301 : Toxic if swallowed.
- H311 : Toxic in contact with skin.
- H314 : Causes severe skin burns and eye damage.
- H317 : May cause an allergic skin reaction.
- H318 : Causes serious eye damage.
- H330 : Fatal if inhaled.
- H331 : Toxic if inhaled.
- H334 : May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 : May cause respiratory irritation.
- H370 : Causes damage to organs.

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Biosperse™ CN5500 MICROBIOCIDE  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries  
 857829

Version: 1.5

**Full text of other abbreviations**

Acute Tox. : Acute toxicity  
 Eye Dam. : Serious eye damage  
 Flam. Liq. : Flammable liquids  
 Resp. Sens. : Respiratory sensitisation  
 Skin Corr. : Skin corrosion  
 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 - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation

**SAFETY DATA SHEET**

Revision Date: 04/17/2018

Print Date: 5/2/2018

SDS Number: 000000255223

Biosperse™ CN5500 MICROBIOCIDE  
™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries  
857829

Version: 1.5

(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