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SAFETY DATA SHEET		Revision Date: 08.03.2010
		Print Date: 05.12.2011
Biosperse™ 244 MICROBIOCIDE ™ Trademark, Ashland or its subsidiaries, registered in various countries 308184		MSDS Number: R0525065 Version: 1.3

Conforms to EU Directive 2006/121/EC - MSDS_IT

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Ashland P.O. Box 8619 NL3009 AP, Rotterdam Netherlands EUSMT@ashland.com	Emergency telephone +1-800-ASHLAND (+1-800-274-5263/+1-606-329-5701) , or contact your local emergency telephone number at 112 Product Information +31 10 497 5000 (in the Netherlands), or contact your local CSR contact person
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Product name	Biosperse™ 244 MICROBIOCIDE
	™ Trademark, Ashland or its subsidiaries, registered in various countries
Product code	308184
Product Use Description	Biocidal product

2. HAZARDS IDENTIFICATION

Hazard Summary	Harmful Irritant
Risks	Harmful by inhalation and if swallowed. May cause sensitization by skin contact. Risk of serious damage to eyes.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No.	EINECS-No.	Concentration	Symbol(s)	R-phrases
2,2-Dibromo-2-cyanoacetamide	10222-01-2	233-539-7	>=15 - <20%	Xi, Xn, N	R38, R41, R43, R23, R25, R50

For the full text of the R-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

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General Information

Consult a physician. Show this safety data sheet to the doctor in attendance.

Eyes

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention. Remove contact lenses.

Skin

Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water.

Ingestion

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Inhalation

Move to fresh air. Consult a physician after significant exposure. If symptoms persist, call a physician. In case of shortness of breath, give oxygen.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

ABC powder, Water mist, Carbon dioxide (CO₂), Dry chemical

Unsuitable extinguishing media

DO NOT USE: Halons

Hazardous combustion products

carbon dioxide and carbon monoxide

Thermal decomposition

no data available

Precautions for fire-fighting

Keep containers and surroundings cool with water spray.

Personal protective equipment

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

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Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions

Prevent further leakage or spillage if safe to do so. No special environmental precautions required.

Methods for cleaning up

Neutralize with chalk, alkali solution or ammonia. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Large spills should be collected mechanically (remove by pumping) for disposal. Keep in suitable, closed containers for disposal.

Other information

Comply with all applicable federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling

Avoid formation of aerosol. Do not breathe vapours or spray mist. For personal protection see section 8. Provide sufficient air exchange and/or exhaust in work rooms. Avoid exceeding of the given occupational exposure limits (see section 8). Smoking, eating and drinking should be prohibited in the application area. Normal measures for preventive fire protection.

Storage

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Stable under recommended storage conditions. Protect from frost.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

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Eye protection

Safety glasses with side-shields

Skin and body protection

Wear as appropriate:

Safety shoes

Wear resistant gloves such as:

Nitrile rubber

butyl-rubber

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

In the case of vapour formation use a respirator with an approved filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	no data available
Colour	amber
Odour	slight
Boiling point/boiling range	(>)120,00 °C
Melting point/range	(<)-20 °C
Sublimation point	no data available
pH	(+/- 1.4)2,9
Flash point	(+/- 3.3)162,00 °C, Pensky Martens closed cup
Ignition temperature	no data available
Evaporation rate	no data available
Lower explosion limit/Upper explosion limit	2,9 %(V) / 12,9 %(V)
Dust explosion class	no data available
Particle size	no data available
Vapour pressure	22,66 hPa Calculated Vapor Pressure
Vapour density	no data available
Density	(+/- 0.01)1,185 g/cm ³ @ 77 °F / 25 °C
Bulk density	no data available
Solubility	no data available
Partition coefficient: n-octanol/water	no data available
log Pow	no data available
Autoignition temperature	no data available
Viscosity, dynamic	no data available

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Viscosity, kinematic	no data available
Hydrolysis	no data available
Physico-chemical removability	no data available

10. STABILITY AND REACTIVITY

Stability

Stable under recommended storage conditions.

Conditions to avoid

None known.

Incompatible products

Strong acids, strong bases, Strong oxidizing agents

Hazardous decomposition products

carbon dioxide and carbon monoxide

Hazardous reactions

Hazardous polymerisation does not occur.

11. TOXICOLOGICAL INFORMATION

Exposure routes

Skin contact, Eye Contact, Ingestion, Inhalation

Eye contact

Causes serious eye irritation.

Skin contact

Causes mild skin irritation.

Ingestion

Harmful if swallowed.

Inhalation

Harmful by inhalation.

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Liver, kidney

Symptoms

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no data available

Target Organs

no data available

Acute oral toxicity

2,2-Dibromo-2-cyanoacetamide (10222-01-2) : LD 50 male Rat: 235 mg/kg
LD 50 female Rat: 178 mg/kg

Acute inhalation toxicity

2,2-Dibromo-2-cyanoacetamide (10222-01-2) : LC 50
Rat: 0,32 mg/L, 4 h

Acute dermal toxicity

2,2-Dibromo-2-cyanoacetamide (10222-01-2) : LD 50
Rabbit:
> 2.000 mg/kg

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradability

2,2-Dibromo-2-cyanoacetamide (10222-01-2) : no data available

Physico-chemical removability

2,2-Dibromo-2-cyanoacetamide (10222-01-2) : no data available

Bioaccumulation : The bioaccumulation potential cannot be determined.

Ecotoxicity effects

Toxicity to fish

2,2-Dibromo-2-cyanoacetamide (10222-01-2) : no data available

Toxicity to daphnia and other aquatic invertebrates.

2,2-Dibromo-2-cyanoacetamide (10222-01-2) : no data available

Toxicity to algae

2,2-Dibromo-2-cyanoacetamide (10222-01-2) : no data available

Toxicity to bacteria

2,2-Dibromo-2-cyanoacetamide (10222-01-2) : no data available

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13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with the European Directives on waste and hazardous waste. Do not contaminate ponds, waterways or ditches with chemical or used container. Container hazardous when empty. Dispose of in accordance with local regulations.

Empty 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. Do not burn, or use a cutting torch on, the empty drum.

European Waste Catalogue

The Waste code should be assigned in discussion between the user and the waste disposal company.

14. TRANSPORT INFORMATION

REGULATION

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

Not dangerous goods

ADNR

Not dangerous goods

RID

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

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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.

15. REGULATORY INFORMATION

Hazard symbols



Harmful

R-phrases(s)

R20/22	Harmful by inhalation and if swallowed.
R41	Risk of serious damage to eyes.
R43	May cause sensitization by skin contact.

S-phrases(s)

S23	Do not breathe vapour.
S24	Avoid contact with skin.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39	Wear suitable gloves and eye/face protection.
S51	Use only in well-ventilated areas.
S60	This material and its container must be disposed of as hazardous waste.

Contains

2,2-Dibromo-2-cyanoacetamide	10222-01-2
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Notification status

US. Toxic Substances Control Act	y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA).	y (positive listing)
Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	
Australia. Industrial Chemical (Notification and Assessment) Act	y (positive listing)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	y (positive listing)
Japan. Kashin-Hou Law List	y (positive listing)
Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	y (positive listing)
China. Inventory of Existing Chemical Substances	y (positive listing)

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Switzerland

Directive 1999/13/EC

not applicable

16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R43	May cause sensitization by skin contact.
R20/22	Harmful by inhalation and if swallowed.
R41	Risk of serious damage to eyes.
R38	Irritating to skin.
R23	Toxic by inhalation.
R25	Toxic if swallowed.
R50	Very toxic to aquatic organisms.

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 Ashland's Environmental Health and Safety Department (+31 10 497 5000).