

# MATERIAL SAFETY DATA SHEET

MSDS DATE: 04/12/08

FILE NO.: ALX-850-325

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## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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**PRODUCT NAME:** Hepatotox Set™ 1  
**PRODUCT CODES:** ALX-850-325

**DISTRIBUTOR:** ALEXIS Corporation  
**ADDRESS:** Industriestrasse 17  
CH-4415 Lausen  
Switzerland

**TELEPHONE:** +41 61 926 8989  
**FAX PHONE:** +41 61 926 8979  
**WEBSITE:** www.axxora.com

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## SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

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<u>INGREDIENT NAME:</u>	<u>CAS #</u>	<u>EINECS #</u>	<u>Prod. Nr</u>
Microcystin-LA	96180-79-9	N/A	ALX-350-096
Microcystin-LF	N/A	N/A	ALX-350-081
Microcystin-LR	101043-37-2	N/A	ALX-350-012
Microcystin-LW	N/A	N/A	ALX-350-080
Microcystin-LY	N/A	N/A	ALX-350-148
Microcystin-RR	111755-37-4	N/A	ALX-350-043
Microcystin-YR	101064-48-6	N/A	ALX-350-044
Nodularin	118399-22-7	N/A	ALX-350-061

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## SECTION 3: HAZARDS IDENTIFICATION

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<u>INGREDIENT NAME:</u>	<u>ACUTE HEALTH EFFECTS</u>
Microcystin-LA	HIGHLY IRRITANT. VERY TOXIC. Fatal by inhalation, ingestion, or skin absorption. MAY BE CARCINOGENIC.
Microcystin-LF	HIGHLY IRRITANT. VERY TOXIC. Fatal by inhalation, ingestion, or skin absorption. MAY BE CARCINOGENIC.
Microcystin-LR	HIGHLY IRRITANT. VERY TOXIC. Fatal by inhalation, ingestion, or skin absorption. MAY BE CARCINOGENIC.
Microcystin-LW	HIGHLY IRRITANT. VERY TOXIC. Fatal by inhalation, ingestion, or skin absorption. MAY BE CARCINOGENIC.
Microcystin-LY	HIGHLY IRRITANT. VERY TOXIC. Fatal by inhalation, ingestion, or skin absorption. MAY BE CARCINOGENIC.
Microcystin-RR	HIGHLY IRRITANT. VERY TOXIC. Fatal by inhalation, ingestion, or skin absorption. MAY BE CARCINOGENIC.
Microcystin-YR	HIGHLY IRRITANT. VERY TOXIC. Fatal by inhalation, ingestion, or skin absorption. MAY BE CARCINOGENIC.
Nodularin	TOXIC by inhalation, ingestion, or skin absorption.

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## SECTION 4: FIRST AID MEASURES

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**EYES:** Rinse immediately with plenty of water for 15 minutes. Check for and remove any contact lenses. Seek medical attention if symptoms appear.

**SKIN:** Wash immediately with water for 15 minutes. Remove contaminated clothing. Seek medical attention if symptoms appear.

**INGESTION:** Rinse mouth with water. Do not induce vomiting. Seek medical attention if symptoms appear. Provide MSDS and label information if possible.

**INHALATION:** Take into fresh air. If breathing is difficult, administer oxygen. Get medical attention.

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## SECTION 5: FIRE FIGHTING MEASURES

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**EXTINGUISHING MEDIA:** Water spray, water foam, polymer foam, carbon dioxide, dry chemicals.

**SPECIAL FIRE FIGHTING PROCEDURES:** In case of fire, watch out for the formation of toxic smoke and gases. Wear self-contained respiration equipment. Prevent contact with skin and eyes.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** May be combustible at high temperatures.

**HAZARDOUS DECOMPOSITION PRODUCTS:** N/A

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Evacuate area. Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves.

**ACCIDENTAL RELEASE MEASURES:** Avoid formation of dust, sweep up spill and place in sealed container and hold for disposal. Ventilate area and wash spill site after material pickup is complete.

## SECTION 7: HANDLING AND STORAGE

**HANDLING AND STORAGE:** Keep locked up. Keep away from heat, sources of ignition and incompatibles such as oxidizing agents. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Avoid contact with skin and eyes; do not breathe dust. Avoid prolonged or repeated exposure. Immediately remove all contaminated clothing. Wash hands before breaks and after work. Avoid eating, drinking and storage of food in the work room. Store tightly sealed at -20°C (see individual labels for details).

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use only in chemical fume hood. Safety shower and eye bath.

**VENTILATION:** Government approved respirator.

**EYE PROTECTION:** Chemical safety goggles.

**SKIN PROTECTION:** Compatible gloves, protective coat or clothing.

**SECTION 8 NOTES:** Wash thoroughly after handling. Wash contaminated clothing before reuse.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Not available.

## SECTION 10: STABILITY AND REACTIVITY

**STABILITY:** Stable. Avoid strong oxidizing agents.

**HAZARDOUS DECOMPOSITION:** Carbon monoxide, carbon dioxide, nitrogen oxides.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

<u>INGREDIENT NAME:</u>	<u>RTECS #</u>	<u>LD50</u>	<u>Species</u>	<u>Route</u>
Microcystin-LA	GT2805000	25 µg/kg 122 µg/kg	Mouse Rat	Intraperitoneal Intraperitoneal

HIGHLY IRRITANT. VERY TOXIC. Fatal by inhalation, ingestion, or skin absorption. MAY BE CARCINOGENIC. May cause respiratory tract, eye and skin irritation. May cause allergic reaction. May cause damage to liver and gastrointestinal tract. Irritating to mucous membranes and upper respiratory system.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Microcystin-LF	N/A	N/A	N/A	N/A
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HIGHLY IRRITANT. VERY TOXIC. Fatal by inhalation, ingestion, or skin absorption. MAY BE CARCINOGENIC. May cause respiratory tract, eye and skin irritation. May cause allergic reaction. May cause damage to liver and gastrointestinal tract. Irritating to mucous membranes and upper respiratory system.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Microcystin-LR	GT2810000	5 mg/kg	Rat	Oral
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HIGHLY IRRITANT. VERY TOXIC. Fatal by inhalation, ingestion, or skin absorption. MAY BE CARCINOGENIC. May cause respiratory tract, eye and skin irritation. May cause allergic reaction. May cause damage to liver and gastrointestinal tract. Irritating to mucous membranes and upper respiratory system.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Microcystin-LW	N/A	N/A	N/A	N/A
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HIGHLY IRRITANT. VERY TOXIC. Fatal by inhalation, ingestion, or skin absorption. MAY BE CARCINOGENIC. May cause respiratory tract, eye and skin irritation. May cause allergic reaction. May cause damage to liver and gastrointestinal tract. Irritating to mucous membranes and upper respiratory system.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.



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Microcystin-LY

R26/27/28  
R36/37/38  
R43

T+, very toxic

Microcystin-RR

R26/27/28  
R36/37/38  
R43

T+, very toxic

Microcystin-YR

R26/27/28  
R36/37/38  
R43

T+, very toxic

Nodularin

R23/24/25  
R36/37/38  
R43

T, toxic

## R-PHRASES:

R26/27/28 - Very toxic by inhalation, in contact with skin and if swallowed.

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.

R36/37/38 - Irritating to eyes, respiratory system and skin.

R43 - May cause sensitization by skin contact.

## S-PHRASES:

S7 - Keep container tightly closed.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## U.S. FEDERAL REGULATIONS:

Not available.

## HCS CLASSIFICATION:

Not available.

## WHMIS (CANADA):

Not available.

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## SECTION 16: OTHER INFORMATION

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### DISCLAIMER:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Alexis Corporation shall not be held liable for any damage resulting from handling or from contact with the above product.

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