

# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL IDENTIFICATION

**Product Name:** Cyanide-free Ex-Lyse Reagent  
**Synonyms:** Stromatolyse reagent  
**NIOSH/RTECS Number:** None  
**CAS No.:** None

**Product Number(s):** RA-9500CF

**Manufacturer:** Drew Scientific Limited  
Sowerby Woods Business Park  
Barrow-in-Furness  
Cumbria, LA14 4QR,  
United Kingdom

**Telephone:** (++44) (0)1229 432089

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## SECTION 2 – COMPOSITION/INFORMATION OF INGREDIENTS

| <u>Component</u> | <u>Concentration</u> | <u>CAS Number</u> |
|------------------|----------------------|-------------------|
|------------------|----------------------|-------------------|

Contains no hazardous ingredients greater than 1% w/v concentration.

## SECTION 3 – HAZARDS IDENTIFICATION

|                  | <u>Code</u> |
|------------------|-------------|
| [1] Health       | 0 = None    |
| [0] Flammability | 1 = Slight  |
| [0] Reactivity   | 2 = Caution |
| [2] Contact      | 3 = Severe  |

**Physical Hazards:** None  
**Potential Health Effects:** Contact irritant for eyes and mucous membranes  
**Product Hazard Classification:** OSHA – Not listed  
EU – Not applicable  
WHMIS – Exempt

## SECTION 4 – FIRST AID MEASURES

**Eye Contact:** Flush eyes thoroughly with water. If irritation occurs, seek medical attention.

**Ingestion:** Wash contact surfaces with water. Contact poison control center or seek medical attention if swallowed.

**Inhalation:** Move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately. Seek medical attention immediately.

**Skin Contact:** Wash affected area with water for at least 15 minutes.

## SECTION 5 – FIRE FIGHTING MEASURES

|  |                                     |
|--|-------------------------------------|
| <b>Flashpoint:</b>                         | Not applicable                      |
| <b>Flammable Limits:</b>                   | Not applicable                      |
| <b>Autoignition Temperature:</b>           | Not applicable                      |
| <b>Fire Extinguishing Media:</b>           | Any. Does not support combustion.   |
| <b>Special Fire and Explosion Hazards:</b> | None                                |
| <b>Hazardous Combustion Products:</b>      | None                                |
| <b>Firefighter Protective Equipment:</b>   | Self-contained breathing apparatus. |

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

|                                   |  |
|-----------------------------------|--|
| <b>Personal Precautions:</b>      | No special precautions required. Use good laboratory practice.   |
| <b>Spills and Leaks:</b>          | Dispose through a sanitary sewer, or use absorbent material and dispose as non-hazardous solid waste. Disposal must comply with Federal, State and Local requirements. |
| <b>Environmental Precautions:</b> | Contain spill to prevent contamination of surrounding areas.   |

## SECTION 7 - HANDLING AND STORAGE

|                              |  |
|------------------------------|--|
| <b>Handling Precautions:</b> | Avoid eye and mucous membrane contact. Use good laboratory practice. |
| <b>Storage Conditions:</b>   | Store at 2 to 30°C (30 to 86°F).                                     |

## SECTION 8 – EXPOSURE/CONTROLS PERSONAL PROTECTION

|                                |   |
|--------------------------------|---|
| <b>Exposure Limits:</b>        | OSHA – None established<br>ACGIH – None established<br>DFG MAK – None established |
| <b>Engineering Controls:</b>   | Use in well ventilated areas.   |
| <b>Respiratory Protection:</b> | Under normal use conditions, no respiratory protection is required.               |
| <b>Eye Protection:</b>         | Safety glasses, goggles or face shield recommended.                               |
| <b>Skin Protection:</b>        | Latex or equivalent gloves recommended.   |

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

|                              |                         |                                 |     |
|------------------------------|-------------------------|---------------------------------|-----|
| <b>Boiling Point:</b>        | N/A                     | <b>Vapor Pressure (mm Hg):</b>  | N/A |
| <b>Melting Point:</b>        | N/A                     | <b>Vapor Density (Air = 1):</b> | N/A |
| <b>Specific Gravity:</b>     | 1.01 (Water = 1)        | <b>Evaporation Rate</b>         |     |
| <b>Solubility (water):</b>   | Miscible                | <b>(butyl acetate = 1):</b>     | N/A |
| <b>Appearance and Color:</b> | Clear, colorless liquid |                                 |     |

## **SECTION 10 – STABILITY AND REACTIVITY**

|                                   |  |
|-----------------------------------|--|
| <b>Stability:</b>                 | Stable at normal temperatures and pressures.           |
| <b>Conditions to Avoid:</b>       | Avoid freezing. Keep away from incompatible materials. |
| <b>Hazardous Incompatibility:</b> | Strong acids, strong oxidizers                         |
| <b>Decomposition Products:</b>    | None   |

## **SECTION 11 TOXICOLOGICAL INFORMATION**

|   |   |
|---|---|
| <b>Toxicity of Hazardous Ingredients:</b> | None  |
| <b>Primary Routes of Exposure:</b>        | Contact with eyes, mucous membranes, skin and inhalation.   |
| <b>Effects of Acute Exposure:</b>         | Eyes: Severe burns, irritation, possible loss of sight.<br>Inhalation: Coughing, difficulty in breathing<br>Skin: Irritation and redness<br>Ingestion: Burning in mouth throat, stomach; nausea, vomiting, diarrhea, shock and loss of consciousness.<br>Full toxicological properties have not been determined for this product. |
| <b>Effects of Chronic Exposure:</b>       | Eye, inhalation and skin effects are similar to acute exposure. No long-term effects of ingestion have been reported in humans.   |
| <b>Symptoms of Overexposure:</b>          | Eyes: Redness, burning and watering.<br>Inhalation: Coughing, difficulty in breathing, depression and coma.<br>Skin: Redness, dry, cracking.<br>Ingestion: Burning mouth, throat, stomach, nausea, vomiting, diarrhea, shock and loss of consciousness.   |
| <b>Carcinogenicity:</b>                   | Contains no ingredients listed as potential carcinogens by ACGIH, IARC, NTP or OSHA.  |
| <b>Other Effects:</b>                     | None known.   |
| <b>Conditions Aggravated by Exposure:</b> | Acute or chronic eye and skin conditions may be aggravated by this product.   |

## **SECTION 12 – ECOLOGICAL INFORMATION**

|                          |  |
|--------------------------|--|
| <b>Ecotoxicity:</b>      | Toxic to fish and other water-borne organisms. |
| <b>Biodegradability:</b> | No information available.                      |
| <b>Mobility:</b>         | No information available.                      |

## **SECTION 13 – DISPOSAL CONSIDERATIONS**

|                        |   |
|------------------------|---|
| <b>Waste Disposal:</b> | Waste disposal must comply with Federal, State and Local requirements. Contact local authorities for information. |
|------------------------|---|

## **SECTION 14 – TRANSPORT INFORMATION**

|                               |   |
|-------------------------------|---|
| <b>Transport Regulations:</b> | Transportation of this product not regulated according to the definition of hazardous in 49CFR (US DOT).<br>Transportation of this product is also not regulated by IATA, ICAO, Canadian TDG or European ADR. |
|-------------------------------|---|

## **SECTION 15 – REGULATORY INFORMATION**

### **US Regulatory Information:**

|                                 |                      |
|---------------------------------|----------------------|
| SARA 313:                       | None listed          |
| California Proposition 65:      | No compounds listed. |
| Massachusetts MSL:              | None listed.         |
| New Jersey Dept. of Health RTK: | None listed.         |
| Pennsylvania RTK:               | None listed.         |

**Canada:** Product is exempt from WHMIS and MSDS requirements.

**Ingredients on Disclosure List:** None

### **Ingredients with Unknown**

**Toxicological Properties:** Exempt product

**EU:** No dangerous ingredients listed.

## **SECTION 16 – OTHER INFORMATION**

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT, BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. DREW SCIENTIFIC LTD SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

Signed:

Title:

Date: