

Material Safety Data Sheet

Bio-Source DTEA II™
**ORGANIC DEPOSIT PENETRANT, CLEANER, &
INHIBITOR**

Bio-Source; P.O. Box 2386; Dacula, GA; 30019

*SERVING THE AWT, SELECT COMMERCIAL SITES, AND IS PROUD TO BE A DEPT. OF DEFENSE
CONTRACTOR*

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

24-Hour Emergency Phone Number: CHEMTEL 1-800-255-3924

Page: 1 Effective Date: March 17, 2003

2. COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary aliphatic amide hydrolysates 15%

Inerts 85%

chemical family: amide hydrolysate

description: light amber liquid

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: Based on similar materials, this materials may cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness.

SKIN: Based on similar materials, prolonged exposure may cause skin burns. A single prolonged exposure is not likely to result in the material being absorbed through the skin in harmful amounts. May cause allergic reaction but there is no data to suggest this is indeed the case.

INGESTION: Based on similar materials, single dose oral toxicity is extremely low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury. Ingestion may cause gastrointestinal irritation or ulceration. Ingestion may cause burns of mouth and throat.

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INHALATION: No specific data has been generated. Based on similar materials, excessive exposure may

cause irritation to upper respiratory tract.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: There is no specific data. Based on related materials,

repeated oral doses of related active ingredient to laboratory animals may result in injury to gastrointestinal

tract, with some mortality.

Repeated dermal application of the active ingredient which is similar to this material, fatty amines and related

molecules in laboratory animals did produce any effects which may cause this material to be a potential skin

sensitizer. This a property shared by many amines (amide hydrolysates), a common component in commercial formulations presently used in water treatment chemicals and metal working fluid amines.

CANCER INFORMATION: No data

TERATOLOGY (BIRTH DEFECTS): No data

REPRODUCTIVE EFFECTS: No data

4. FIRST AID

EYE: Immediate and continuous irrigation with flowing water for at least 30 minutes is imperative. Prompt medical consultation is essential.

SKIN: Wash off in flowing water or shower.

INGESTION: Do not induce vomiting. Give large amounts of water or milk if available, and transport patient to a medical facility. Do not give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN:

No specific data has been determined but based on similar materials, the materials May cause tissue

destruction leading to stricture. If lavage is performed, suggest endotracheal and/or esophagosopic control.

If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care: Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

FLASH POINT: None to 212 deg. F

METHOD USED: SFCC

FLAMMABILITY LIMITS

LFL: Not applicable

UFL: Not applicable

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Hazardous combustion products may include but are not limited to: sulfur oxides, nitrogen oxides, carbon monoxide, carbon dioxide.

OTHER FLAMMABILITY INFORMATION: This material will not burn until the water has evaporated. Residue can burn.

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EXTINGUISHING MEDIA: To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical, or foam.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. Contain fire run-off if possible. Review the "Accidental Release Measures" and the "Ecological Information" sections of this MSDS.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and

gloves. If protection equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Clear all personnel from area. Barricade area. Avoid contact with eyes and skin. May be a slipping hazard. Use appropriate safety equipment. For additional information, refer to "Exposure Controls/Personal Protection".

PROTECT THE ENVIRONMENT: Contain material to prevent contamination of the soil, surface water and ground water. Spills should be collected to prevent contamination of waterways.

CLEANUP: Contain spill if possible. Clean up with absorbent material. Collect material in suitable and properly labeled open containers. Please refer to Disposal Information, MSDS Section 13.

7. HANDLING AND STORAGE (special note low temperature conditions – 50 deg. F.)

HANDLING: Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Refer to "Exposure Controls/Personal Protection", Section 8, of the MSDS.

STORAGE: Keep containers tightly closed when not in use. Do not store near food, foodstuff, drugs or

potable water supplies. Storage must only be in original containers. If exposed to temperatures below freezing point (40F), 50, assure product reaches 50 deg. F, 10 deg. C prior to use. Roll drum to assure adequate mixing prior to use.

please note: freezing will not harm product performance, simply bring to room temperature by storing at room temperature and allowing to warm up, it is not recommended to heat or to put a heating device into contact with the liquid product

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

PERSONAL PROTECTIVE EQUIPMENT EYE/FACE PROTECTION: Use chemical goggles.

Eye wash fountain should be located in immediate work area.

SKIN PROTECTION: When prolonged or repeated contact could occur, use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron or full-body suit will depend on operation.

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RESPIRATORY PROTECTION: When respiratory protection is required for certain operations, use an approved air-purifying respirator (organic vapors). **Respiratory protection may be required if operating conditions create an aerosol of product.**

EXPOSURE GUIDELINES:

If end-use operation results in misting or aerosols and cannot be controlled, an organic vapor Respirator, in combination with gloves and goggles is recommended.

Exposure guidelines have not been set.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE:

ODOR: Vinegar-like

COLOR: tea brown to tan but can be near water white; color does not affect performance or assay

VAPOR PRESSURE: 23.7 mmHg @ 25C (estimated); 100% active ingredient 0.09mm Hg at 68 deg. F.

VAPOR DENSITY (Air=1): 2.25

BOILING POINT: 212F, 100C due to water content; active ingredient b.p. greater than 250 deg. F.

SOLUBILITY IN WATER/MISCIBILITY: Miscible in high proportions

SPECIFIC GRAVITY OR DENSITY: about 8.31 lbs/gal (3.8 kg/3.78 L)

FREEZING/MELTING POINT: below 35 deg. F.; active ingredient freezing point 0.00 deg. F.

PH = 6

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended storage conditions. See storage section.

CONDITIONS TO AVOID: Product can decompose at elevated temperatures.

INCOMPATIBILITY WITH OTHER MATERIALS: Avoid use with aldehydes in concentrated form as under some conditions it can cause a pink color to form. The reaction between aldehydes and this material

has not been studied but it is known that materials of this type which contain an amine function can react with aldehydes form a Schiff base.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products depend upon temperature, air supply and the presence of other materials.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ENVIRONMENTAL FATE - INHERENTLY BIODEGRADABLE

This material will degrade at a moderate rate and is considered 'inherently biodegradable' according to OECD protocols. The active ingredient degraded to 45% in a 28 day Zahn Wellens Inherent Biodegradability (ECD 302B) test

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ECOTOXICITY: Undetermined for diluted formulation but because this is a surface active agent, it does have the potential to be toxic to fish.

12. ECOLOGICAL INFORMATION (For detailed Ecological data write or call the address;

Bio-Source; P.O. Box 898; ;Snellville, GA; 30078-0898

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Bio-Source INC. HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING

PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/information On Ingredients).

FOR UNUSED & UNCONTAMINATED PRODUCT: The preferred options include sending to a licensed, permitted: incinerator or other thermal destruction device.

14. TRANSPORT INFORMATION:

DEPARTMENT OF TRANSPORTATION (D.O.T.): For DOT regulatory information, if required, consult transportation regulations, product shipping papers or contact your representative. Can ship as nonhazardous

as per D.O.T. regulations.

15. REGULATORY INFORMATION (Not meant to be all-inclusive-selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject

to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made

for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See

other sections for health and safety information.

U.S. REGULATIONS

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories"

promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title 111) and is considered, under applicable definitions. to meet the following categories: none

TOXIC SUBSTANCES CONTROL ACT (TSCA):

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

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STATE RIGHT-TO-KNOW: The following product components are cited on certain state lists as mentioned.

Non-listed components may be shown in the composition section of the MSDS.

REGULATORY INFORMATION (CONTINUED)

OSHA HAZARD COMMUNICATION STANDARD:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND):

This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA which may require reporting of releases:

16. OTHER INFORMATION

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Health 2

Flammability 1

Reactivity 0

MSDS STATUS:

The data contained in this data sheet is based on Bio-Source, Inc.'s present knowledge of the health and safety properties of the product, and is believed to be accurate and given in good faith.

The physical and chemical properties are typical values only and do not

constitute the specification of the product, which will be agreed separately.

It is for the customer to satisfy itself on the suitability of the product for its own particular purpose Bio-Source gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded, except to the extent that law prevents such exclusion.