



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFICATION
Brand Name: Microbloc® Biologx Fuel and Oil Cleaner
Chemical Name: Fuel and Oil Cleaner
Common Name: Bio-Remediation

HMIS NFPA

Table with 3 columns: Hazard Category, HMIS, NFPA. Rows include HEALTH, FLAMMABILITY, PHYSICAL HAZARD, and HMIS PPE.

PREPARER
Microbloc, LLC
PO Box 470
Kernersville, NC 27285

EMERGENCY TELEPHONE NUMBER
1-888-328-6653

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

NO HAZARDOUS INGREDIENTS

Table with 5 columns: OTHER INGREDIENTS, %, CAS, EXPOSURE LEVELS, LD(50)ROUTE SPECIES. Lists Ethylated Linear Alcohol and Alkyl Aryl Sulfonic Acid.

3. HAZARDS IDENTIFICATION

POTENTIAL ACUTE HEALTH EFFECTS:

ROUTE OF ENTRY: EYES, SKIN, INHALATION, INGESTION

SKIN CONTACT: MAY CAUSE IRRITATION. ORGANISMS USED ARE NON-PATHOGENIC BUT CAN CAUSE INFECTION WHEN IN CONTACT WITH OPEN WOUNDS OR BROKEN SKIN.

SKIN ABSORPTION : SYSTEMATICALLY TOXIC CONCENTRATIONS WILL PROBABLY NOT BE ABSORBED THROUGH THE SKIN.

EYE: DIRECT CONTACT MAY CAUSE IRRITATION.

INHALATION: MAY CAUSE IRRITATION, COUGHING, CONGESTION.

INGESTION: MAY CAUSE IRRITATION, NAUSEA OR VOMITING. ACUTE OVER-EXPOSURE

EFFECTS: AS ABOVE. OVEREXPOSURE MAY CAUSE HEADACHE, DIZZINESS, TIREDNESS, NAUSEA AND VOMITING.



CHRONIC OVER EXPOSURE
EFFECTS: DERMATITIS.

POTENTIAL HEALTH EFFECTS

PRIMARY ROUTE(S) OF ENTRY

Eye and Skin contact, Ingestion

SYMPTOMS OF EXPOSURE

Eye Contact: None.

Skin Contact: None.

Ingestion: Direct ingestion may cause mild diarrhea.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None known.

REPORTED AS CARCINOGEN OR POTENTIAL CARCINOGEN

Not Applicable

OSHA

National Toxicology Program (NTP) International Agency for Research on Cancer (IARC)

4. FIRST AID MEASURES

EYES: FLUSH EYES WITH ABUNDANT WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS OPEN TO ENSURE

COMPLETE IRRIGATION OF THE ENTIRE EYE CAVITY. GET MEDICAL ATTENTION.

SKIN: WASH SKIN WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. IF SYMPTOMS PERSIST, GET MEDICAL ATTENTION.

INHALATION: REMOVE VICTIM TO FRESH AIR. ASSIST BREATHING AS NEEDED. IF SYMPTOMS PERSIST, GET MEDICAL ATTENTION.

INGESTION: **DO NOT INDUCE VOMITING.** IF VICTIM CONSCIOUS, GIVE 1 - 2 GLASSES OF WATER TO DILUTE STOMACH CONTENTS. **GET MEDICAL ATTENTION.** NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

NOTES TO PHYSICIAN: ALL TREATMENTS SHOULD BE BASED ON OBSERVED SIGNS/SYMPTOMS OF DISTRESS IN THE PATIENT.

THE POSSIBILITY OF OVEREXPOSURE TO MATERIALS OTHER THAN THIS PRODUCT SHOULD BE CONSIDERED

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD OF DETERMINATION: NONE. TCC

UPPER EXPLOSION LIMIT

(% BY VOLUME): NOT APPLICABLE

LOWER EXPLOSION LIMIT

(% BY VOLUME): NOT APPLICABLE

AUTO-IGNITION TEMPERATURE: NOT AVAILABLE

FLAMMABILITY CLASSIFICATION: NON-FLAMMABLE

CONDITIONS OF FLAMMABILITY: NONE (PRODUCT WILL NOT BURN).

MEANS OF EXTINCTION: USE WATER SPRAY, DRY CHEMICAL OR FOAM.

SPECIAL FIRE FIGHTING

PROCEDURES: FIREFIGHTERS SHOULD WEAR FULL PROTECTIVE EQUIPMENT AND USE APPROVED SELF

CONTAINED BREATHING APPARATUS. USE WATER SPRAY TO COOL FIRE EXPOSED

CONTAINERS TO PREVENT PRESSURE BUILDUP AND POSSIBLE RUPTURE.

HAZARDOUS COMBUSTION

PRODUCTS: OXIDES OF CARBON AND NITROGEN.

EXPLOSION DATA: NOT APPLICABLE

SENSITIVITY TO STATIC

DISCHARGE: NOT SENSITIVE SENSITIVITY TO MECHANICAL IMPACT : NOT SENSITIVE



6. ACCIDENTAL RELEASE MEASURES

LEAK AND SPILL PROCEDURES: REMOVE UNPROTECTED PERSONNEL AWAY FROM SPILL AREA. VENTILATE AREA. CLEANUP PERSONNEL MUST WEAR APPROPRIATE EQUIPMENT AS OUTLINED ABOVE.
CAUTION: SPILL AREA MAY BE SLIPPERY.
SMALL SPILLS: MOP UP, FLUSH RESIDUE WITH WATER.
LARGE SPILLS: DIKE SPILL. RECLAIM ALL MATERIAL POSSIBLE. ABSORB REMAINDER WITH INERT MATERIAL AND PLACE IN SUITABLE CONTAINERS FOR DISPOSAL. FLUSH RESIDUE WITH WATER. CLEAN SPILL AREA WITH DETERGENT AND WATER.

7. HANDLING AND STORAGE

HANDLING PROCEDURES AND EQUIPMENT: DO NOT GENERATE / BREATHE MISTS. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. REMOVE CONTAMINATED CLOTHING AND LAUNDRER BEFORE REUSE. AVOID CONTACT WITH OPEN WOUNDS OR BROKEN SKIN. WASH SKIN THOROUGHLY WITH SOAP AND WATER AFTER USE. KEEP CONTAINER CLOSED WHEN NOT IN USE.

READ AND FOLLOW ALL PRODUCT LABELS. DO NOT CONTAMINATE FOOD, FEED OR POTABLE WATER DURING USE OR STORAGE OF THIS PRODUCT.
STORAGE REQUIREMENTS: KEEP OUT OF REACH OF CHILDREN. STORE AWAY FROM FOOD ITEMS AND POTABLE WATER SYSTEMS.

STORE IN A COOL WELL VENTILATED AREA . (MIN 4 ° C MAX 60 ° C). AVOID EXPOSURES TO TEMPERATURE EXTREMES TO MAINTAIN SHELF LIFE.
DO NOT RE-USE CONTAINER.
STORE IN ORIGINAL CONTAINER.
DO NOT FREEZE.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION: WEAR CHEMICAL SAFETY GLASSES WITH SIDE SHIELDS.

RESPIRATORY PROTECTION: NONE NORMALLY REQUIRED. USE NIOSH APPROVED RESPIRATOR IF EXPOSURE LEVELS ARE EXCEEDED OR IF SPRAY MIST CAUSES IRRITATION.

GLOVES: WEAR RUBBER, NEOPRENE OR VINYL GLOVES. INCIDENTAL SKIN CONTACT IS NOT EXPECTED TO CAUSE ANY SIGNIFICANT IRRITATION.

OTHER PROTECTIVE EQUIPMENT: AS NEEDED TO PREVENT ALL CONTACT WITH PRODUCT.
SPECIFIC ENGINEERING CONTROLS..... NONE NORMALLY REQUIRED. USE GENERAL MECHANICAL AND / OR LOCAL EXHAUST AS NEEDED IF MIST IN THE AIR.

EXPOSURE CONTROLS

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: LIQUID
ODOR AND APPEARANCE: OPAQUE WHITE LIQUID WITH MILD CHEMICAL ODOR.
ODOR THRESHOLD: NOT AVAILABLE
SPECIFIC GRAVITY: 0.99-1.005
VAPOR PRESSURE : NOT AVAILABLE
VAPOR DENSITY (AIR=1): NOT AVAILABLE
VOC CONTENT (%): NOT AVAILABLE
EVAPORATION RATE; AS WATER
BOILING POINT; NOT AVAILABLE
PH: 7-9.5
FREEZING POINT: 0 ° C (32 ° F) (VIABLE BACTERIAL CULTURES WILL DIE AT LOW TEMPERATURES). DO NOT FREEZE.
DENSITY (g/ ml): 0.99-1.005
COEFFICIENT OF WATER/OIL
DISTRIBUTION: COMPLETELY WATER SOLUBLE

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE UNDER RECOMMENDED STORAGE CONDITIONS. (MIN 4 ° C MAX 60 ° C).



INCOMPATIBLE MATERIALS: AVOID OXIDIZERS, STRONG ACIDS OR ALKALIS AS MAY INACTIVATE BACTERIAL CULTURES.

CONDITIONS OF REACTIVITY: AVOID TEMPERATURE EXTREMES AS VIABLE BACTERIAL CULTURES MAY BE INACTIVATED.

HAZARDOUS DECOMPOSITION

PRODUCTS: OXIDES OF CARBON AND NITROGEN

11. TOXICOLOGICAL INFORMATION

SENSITIZATION TO MATERIAL: INDIVIDUALS WITH A HISTORY OF DERMAL ALLERGIC REACTION MAY EXPERIENCE SLIGHT REDNESS ON HANDS AND FOREARMS.

CARCINOGENICITY: NO KNOWN CARCINOGENS LISTED BY OSHA, IARC OR NTP.

REPRODUCTIVE EFFECTS: NO KNOWN REPRODUCTIVE EFFECTS.

TERATOGENICITY: NOT AVAILABLE.

MUTAGENICITY: NOT AVAILABLE

TOXICOLOGICALLY SYNERGISTIC

PRODUCTS: NOT AVAILABLE.

12. ECOLOGICAL INFORMATION

THERE IS NO ECOLOGICAL INFORMATION AVAILABLE FOR PRODUCT. INDIVIDUAL COMPONENT INFORMATION (AS AVAILABLE)

ONLY. ECOTOXICOLOGICAL INFORMATION TO FOLLOW IS BASED LARGELY OR COMPLETELY ON INFORMATION FOR COMPONENTS ON A 100% ACTIVE INGREDIENT BASIS.

ECOTOXICOLOGICAL INFORMATION:

AQUATIC TOXICITY: FISH SPECIES DATA: ETHOXYLATED LINEAR ALCOHOL LC50, 96 HR STATIC ACUTE, FATHEAD MINNOW: 8.5 mg/L

ALKYL ARYL SULFONIC ACID LC50, 96 HR, STATIC, ONCORHYNCHUS MYKISS: 3 mg/L

AQUATIC TOXICITY: INVERTEBRATES: ETHOXYLATED LINEAR ALCOHOL LC50, 96 HR STATIC ACUTE, DAPHNIA: 5.3 mg/L

ALKYL ARYL SULFONIC ACID EC50, 48 HR, DAPHNIA MAGNA: 2.9 mg/L

AQUATIC TOXICITY: (GROWTH INHIBITION) PLANTS: NO DATA

ACUTE AQUATIC TOXICITY: MICROORGANISMS: ALKYLARYL SULFONIC ACID EC50, 6 HR, PSEUDOMONAS

FLUORESCENS : 5 mg/L

BIODEGRADABILITY: ETHOXYLATED, LINEAR ALCOHOL COMPONENT IS READILY BIODEGRADABLE. ETHOXYLATED LINEAR

ALCOHOL COMPONENT HAS 88% OXYGEN REMOVAL IN 28 DAYS. 100% DOC REMOVAL

MOBILITY: NOT AVAILABLE.

PERSISTENCE: NOT AVAILABLE

BIOACCUMULATIVE: NOT AVAILABLE

CHEMICAL FATE INFORMATION: NOT AVAILABLE.

OTHER INFORMATION: NOT AVAILABLE.

13. DISPOSAL CONSIDERATIONS

IN ACCORDANCE WITH MUNICIPAL, PROVINCIAL AND FEDERAL REGULATIONS.

14. TRANSPORTATION INFORMATION

DOT Hazard Classification: Non-Hazardous, not regulated

15. REGULATORY INFORMATION

(Not meant to be all-inclusive, selected regulations represented)

OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

Hazardous Non-Hazardous

CERCLA/SUPERFUND (40 CFR 117, 302)

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

SARA EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355)

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

SARA HAZARD CATEGORIES (40 CFR 370)

Acute Chronic Fire Pressure Reactive None



SARA TOXIC SUBSTANCES (40 CFR 372)

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

US TOXIC SUBSTANCES CONTROL ACT/INVENTORY STATUS

N/A

HARMONIZED TARIFF SCHEDULE CODE (UNITED STATES 2005): 3402.12.5000 (Organic surface-active agents, cationic, other)

STATE REGULATIONS

None listed.

16. OTHER INFORMATION

ABBREVIATIONS

C:	Ceiling limit	N/A:	Not Applicable	N/D:	Not determined
N/E:	Not established	N/K:	Not known	RQ:	Reportable quantity
TPQ:	Threshold Planning Quantity				

Date Prepared: 05/20/2011 **Supersedes Date:** 08/02/2010

Prepared by: MSDS Coordinator

Reasons for Revision: Company Address Change

Disclaimer: Nothing contained herein grants or extends a license, express or implied, in connection with patents, issued or pending, of the manufacturer or others. The information contained herein is based on the manufacturer's own study and the works of others. The manufacturer makes no warranties, expressed or implied, as to the accuracy, completeness, or adequacy of the information contained herein. The manufacturer shall not be held liable (regardless of fault) to the vendee's employees, or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of such information. The buyer assumes all risks of the use and/or handling.