

# MATERIAL SAFETY DATA SHEET



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## 1 CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Trade Name Bioform 103  
Manufacturer Biosolutions  
1811 Hayes Suite E  
Grand Haven, MI 49417  
Telephone Numbers - Emergency Assistance  
(616) 846-1210  
Telephone Numbers - General Assistance  
(616) 846-1210

## 2 COMPOSITION / INFORMATION ON INGREDIENTS

**Product Type:** Metalworking Concentrate      **Hazard:** Xi      **R Phrase:** R36/38

Ingredient Name	CAS Number	Percent
Alkanolamine salts of fatty acids and dibasic acids	non-hazardous	<25%
Dipropylene glycol methyl ether	34590-94-8	4-6 %
Alcohols ethoxylated	68002-97-1	<12%

## 3 HAZARDS IDENTIFICATION

**Emergency Overview:** Clear amber liquid at 25 C.

**Health Effects: Eyes:** This product may cause irritation to the eyes.

**Health Effects: Skin:** May cause slight skin irritation

**Health Effects: Inhalation:** High vapor mist may be irritating to the nose, throat and upper respiratory tract.

**Health Effects: Ingestion:** Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

## 4 FIRST AID MEASURES

**Eyes:** Immediately flush eyes with water for at least 15 minutes while holding eyelids open. If irritation persists get medical attention.

**Skin:** For skin contact flush with large amounts of water. If irritation persists, get medical attention.

**Inhalation:** If symptoms are experienced, remove source of contamination or move victim to fresh air. If symptoms persist, get medical attention.

**Ingestion:** If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting.

## 5 FIRE FIGHTING MEASURES

**Flash Point:** Non-flammable

**Upper Flammable Limit:** NA

**Lower Flammable Limit:** NA

**Revision Date** 1/18/11

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**Extinguishing Media:** NA

**Special Firefighting Procedure:** Cool containers exposed to heat with water spray

## 6 ACCIDENTAL RELEASE MEASURES

**Spill and Leak Procedures:** Contain spill, absorb with inert material, place spilled material in appropriate waste container.

**Personal protection in case of large spill:** Splash proof safety goggles. Protective gloves.

## 7 HANDLING & STORAGE

**Precautions:** Avoid prolonged contact with skin and clothing. Keep container sealed when not in use.

**Storage Procedures:** Storage Temperature: 50F to 120F. Do not freeze.

Store in a dry, well-ventilated area. Do not handle or store near an open flame, heat or other sources of ignition. Store away from strong oxidizer

**Engineering Controls:** Use general ventilation. Local exhaust is suggested for use, where possible, in enclosed or confined spaces.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

**Personal Protective Equipment: Eyes/Face:** Wear safety glasses, goggles or face shield as appropriate.

**Personal Protective Equipment: Skin:** Wear suitable protective clothing. Use impervious gloves.

**Personal Protective Equipment: Respiratory:** If vapors are present or irritation is experienced, NIOSH approved respiratory protection for organic vapors should be worn.

**Personal Protective Equipment: General:** Eye wash fountain and emergency showers are recommended.

## 9 PHYSICAL & CHEMICAL PROPERTIES

**Flash Point** Non-flammable

**Boiling Point** > 199 °F

**Specific Gravity** (1.02 g/ml), 8.5 lb/gal @ 25 °C

**Vapor Pressure** 17.5 mm Hg

**Vapor Density** Estimated heavier than air.

**Evaporation Rate** < water

**pH** 9.3 – 9.8

**Solubility in Water** complete

**Appearance and Odor** Clear liquid, amber color. at 25 °C. Mild pleasant odor

**Chemical Stability** Stable under normal conditions.

## 10 STABILITY & REACTIVITY

**Conditions to Avoid:** Avoid strong oxidizing agents. Heat or source of ignition

**Incompatibility:** This product may react with strong oxidizing agents.

**Hazardous Decomposition:** Oxides of carbon

**Hazardous Polymerization:** Will not occur.

**Carcinogenicity:** Not listed as carcinogenic according to IARC, NTP or OSHA.

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## 11 TOXICOLOGICAL INFORMATION

**Mutagenicity:** This product class is non-mutagenic.  
**LD50 Value:** Oral LD50 expected to be >2000 mg/kg  
Dermal LD50 expected to be >2,000 mg/kg  
**Ecotoxicity:** No data available on finished product.

## 12 ECOLOGICAL INFORMATION

**Aquatic toxicity:** No data available on finished product.  
**Environmental Fate:** This product is biodegradable.

## 13 DISPOSAL CONSIDERATIONS

**Disposal Instructions:** Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator.

## 14 TRANSPORT INFORMATION

**DOT Proper Shipping Name:** Not regulated

## 15 REGULATORY INFORMATION

**SARA 302 Status:** Contains no chemicals subject to SARA 302 Reporting

**SARA 313 Chemical:** Contains no chemicals subject to SARA 313 reporting

**Toxic Substances Control Act (TSCA):** All components of this product are listed on TSCA

This product contains no Hazardous Air Pollutants (HAPS)

## 16 OTHER INFORMATION

HAZARD RATINGS	HMIS	NFPA
Health	1	1
Flammability	0	0
Reactivity	0	0
PPE	B	

## 17 DISCLAIMER OF WARRANTY

The information presented herein has been compiled from sources considered to be dependable and is accurate to the best of seller's knowledge. However, seller makes no warranty whatsoever, expressed, implied or of merchantability regarding the accuracy of such data or the results to be obtained from the use of thereof. Seller assumes no responsibility for injury to buyer or third party or any damage to property. Buyer assumes all such risks.