

*Economical*

*Versatile*

*Effective*

*Biodegradable*

*Safe*

---

#### TECHNICAL INFORMATION

- Color – Amber
- PH - 10.0 – 11.0
- Odor – Mild
- Biodegradable
- Boron Free
- Chlorine Free
- Nitrate Free
- Solvent Free
- Phenol Free
- Oil Free

The logo for biosolutions, featuring the word "biosolutions" in a green, lowercase, sans-serif font. The "o" in "bio" is stylized with a leaf-like shape inside it.

1835 Industrial Drive  
Grand Haven, MI 49417  
616-846-1210 Phone  
616-846-1254 Fax  
www.biosolutionsllc.com

# BIO ME 0230

---

## ENVIRONMENTALLY SAFE, WATER BASED COOLANT

---

Bio ME 0230 is a proprietary formulation of colloids and other ingredients that are designed to replace chlorinated paraffin and sulfur effectively without environmental risk. This will also reduce potentially hazardous waste, and potential paint ability problems.

### FEATURES & BENEFITS:

---

Unique characteristics of BIO ME 0230 make this a superior coolant for most industrial applications. These characteristics include:

- Water Based: Safe & easy machine clean up
  - No chlorinated paraffin or sulfur
  - Safe for your employees
  - Cleaner working environment
  - Eliminates oil mist
- Metal Deactivation: Unique protection for galvanized and other metals
- Superior Lubricity: Extends tool life for added cost savings
- Rust Inhibitor: Superior performance in ASTM D1748 humidity cabinet
- Unique Chemistry: Emulsifies oils for cleaner work area
- Unique Formula: Assist in quick removal of metal fines
- Superior wettability: Better coating of the work surface
- Versatile: Wide range of metal working applications
- Variety: For use with ferrous and non-ferrous metals
- Health Benefits: Resistant to Bacterial and Fungal growth
- Fragrance free: No offensive odor

### ENVIRONMENTALLY-SAFE:

---

BIO ME 0230 is a water-based, environmentally-friendly and worker-friendly coolant. (See: **Material Safety Data Sheet**)

### ECONOMICAL:

---

BIO ME 0230 is a competitively-priced, and contains no unnecessary dyes and thickeners.

***Call us to put BIO ME 0230 to work on your equipment.***

# BIO ME 0230



Recommended Usage Guidelines		
Application	Minimum Ratio WATER / COOLANT	Maximum Ratio WATER / COOLANT
Standard Stamping	20:1	10:1
Deep Draws/Forming	10:1	3:1
Piercing/Slitting	20:1	15:1

### Variables that influence ratio

- 1.Type of metal, grade and gauge
- 2.Type of Tooling
- 3.System cleanliness
- 4.Coolant application system
- 5.Depth of Draw
- 6.Product radius'

### Coolant Management

- 1.Clean system prior initial coolant charge (Cleaning procedure available)
  - Drain, disinfect and clean with alkaline cleaner
  - Add coolant per recommended ratio
- 2.Water quality will impact results
  - Soft water will cause excessive foaming
  - Hard water may cause rust issues
  - Assistance available at Biosolutions LLC
- 3.Maintain system cleanliness
  - Excessive dirt and oil will impact tooling
  - Monitoring pH will reduce dermatitis concerns
  - Coolant management services available