



# MATERIAL SAFETY DATA SHEET

**PRODUCT NAME: FLEX CC22**

## SECTION 1: COMPANY AND PRODUCT IDENTIFICATION

**PRODUCT NAME:** Flex

Manufactured By:

Bridgepoint Systems

4282 W 590 W

Salt Lake City, Utah 84123

Company Phone Number: 801-261-1282

Emergency Phone Number: 1-800-535-5053 (Infotrac)

Date Prepared: 02/01/2011

Hazard Rating (Zero=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)

Fire: 0 Health: 2 Reactivity: 0

## SECTION 2: INGREDIENTS

**HAZARDOUS INGREDIENTS:**

**TLV**

**OSHA PEL**

Glycol Ether EB (CAS # 111-76-2)

20ppm

240 mg/m<sup>3</sup> 50 ppm SKIN

Potassium Hydroxide (CAS # 1310-58-3)

2 mg/m<sup>3</sup>

2 mg/m<sup>3</sup>

## SECTION 3: HEALTH HAZARD INFORMATION

### IMMEDIATE HEALTH EFFECTS

**Eyes:** Overexposure may cause irritation to eyes.

**Skin:** Prolonged and repeated contact may cause irritation to skin.

**Inhalation:** Inhalation may cause irritation of upper respiratory passages.

**Ingestion:** Single dose oral toxicity is low. Swallowing large amounts may be harmful.

**PRIMARY ROUTES OF ENTRY:** Eyes, skin contact/absorption, inhalation or ingestion.

**SIGNS/SYMPTOMS OF OVEREXPOSURE:** Gastrointestinal irritation (nausea, vomiting, diarrhea), and/or irritation to the skin, eyes, nose, throat, and respiratory tract.

**TARGET ORGAN EFFECTS:** Irritation of the skin and eyes. Irritation of lungs possible if mists/aerosols are inhaled.

**REPRODUCTIVE/DEVELOPMENTAL INFORMATION:** No data available.

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### **CARCINOGENICITY:**

**NTP:** Known – No; Anticipated – No **OSHA:** TLV-A3 for Glycol Ether EB

**IARC:** Not classifiable as to carcinogenicity to humans.

**LONG TERM EFFECTS:** No data available.

### **SECTION 4: EMERGENCY AND FIRST AID PROCEDURES**

**EYES:** Flush eyes with water for at least 15 minutes. If irritation persists, consult a physician.

**SKIN:** If irritation occurs, flush skin with water for at least 15 minutes. If irritation persists, consult a physician

**INHALATION:** If symptoms of overexposure develop, remove to fresh air. If symptoms persist, consult a physician.

**INGESTION:** Give 8 to 16 ounces of water to dilute substance. Do not induce vomiting. Consult a physician or local Poison Control Center. Never give anything by mouth to an unconscious person.

### **SECTION 5: FIRE, EXPLOSION & REACTIVITY DATA**

**FLASH POINT:** Nonflammable

**EXPLOSIVE LIMITS:** No data available.

**AUTOIGNITION TEMPERATURE:** No data available.

**HAZARDOUS PRODUCTS OF COMBUSTION:** Product is not flammable. Use after, carbon dioxide, dry powder or other media appropriate for materials actually involved in fire.

**EXTINGUISHING MEDIA:** Water spray, foam, dry chemical powder of carbon dioxide.

**FIRE FIGHTING INSTRUCTIONS:** None.

### **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**SMALL SPILL:** Extract liquid with cleaning machine or absorb liquid on inert material such as paper, vermiculite, floor absorbent, and dispose of in accordance with local regulations.

**LARGE SPILL:** Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, contain area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be absorbed with inert material such as sand, clay, earth, or floor absorbent, and shoveled into containers. Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify the proper authorities as required that a spill has occurred.

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### **SECTION 7. PRECAUTIONS FOR HANDLING AND STORAGE**

Store out of reach of children. Keep container closed. Store in a cool, dry location. Avoid freezing or extended storage in high temperatures and away from strong oxidizers and acid products.

### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Ventilation System..... Room ventilation is normally satisfactory. Mechanical assist may be required when vapors or mist are generated.

Personal Respirators..... Respirator recommended if product is misted. Use NIOSH/MSHA approved respiratory protection.

Skin Protection..... Rubber gloves are recommended & other clothing that will prevent contact with this product.

Eye Protection..... Use safety glasses.

### **SECTION 9: PHYSICAL DATA**

**Odor:** Slight lemon odor.  
**Physical State:** Liquid.  
**Appearance:** Clear  
**pH RTU :** 12.0  
**Specific Gravity :** 1.06  
**Boiling Point:** N/D  
**Freezing/Melting Point:** N/E  
**Vapor Pressure:** N/D  
**Vapor Density:** N/D  
**Solubility in Water:** Complete

### **SECTION 10: STABILITY AND REACTIVITY**

**CHEMICAL STABILITY:** Stable.

**CONDITIONS TO AVOID:** None with proper storing and handling.

**MATERIALS TO AVOID:** Strong acids and oxidizing materials.

**HAZARDOUS DECOMPOSITION:** Exposure to fire may liberate carbon dioxide, carbon monoxide, organic acids and other unidentified thermal decomposition products from this product or its packaging.

**HAZARDOUS POLYMERIZATION:** Will not occur.

### **SECTION 11. TOXICOLOGICAL INFORMATION**

**ROUTES OF EXPOSURE:** Skin absorption, eye contact, inhalation, and ingestion.

**CARCINOGENICITY:**

**NTP:** Known – No; Anticipated – No **OSHA:** TLV-A3 for Glycol Ether EB

**IARC:** Not classifiable as to carcinogenicity to humans.

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**TERATOGENICITY, MUTAGENICITY, OR OTHER REPRODUCTIVE EFFECTS:** No data available.

**CONDITIONS AGGREGATED BY EXPOSURE:** No data available.

**SYNERGISTIC MATERIALS:** No data available.

**TOXICOLOGY:** The calculated LD50 of the product is >5,000 mg/kg (oral/rat).

**Glycol Ether EB** - Oral Rat LD50: 500- 3000 mg/kg Dermal Rabbit LD50: 400 mg/kg;  
Inhalation Rat LC50: 450 ppm. (4 hours)

## SECTION 12. ECOLOGICAL INFORMATION

### **Glycol Ether EB**

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in most sensitive species tested).

#### Fish Acute & Prolonged Toxicity

LC50, bluegill (*Lepomis macrochirus*), 96 h: 820 - 1,490 mg/l

LC50, rainbow trout (*Oncorhynchus mykiss*), 96 h: 1,700 mg/l

#### Aquatic Invertebrate Acute Toxicity

LC50, water flea *Daphnia magna*: 835 mg/l

EC50, water flea *Daphnia magna*, immobilization: 1,600 - 2,500 mg/l

LC50, grass shrimp (*Palaemonetes pugio*), static, 96 h: 5.4 mg/l

LC50, common shrimp *Crangon crangon*, static, 96 h: 550 - 950 mg/l

#### Aquatic Plant Toxicity

EC50, green alga *Pseudokirchneriella subcapitata* (formerly known as *Selenastrum capricornutum*), biomass growth inhibition, 72 h: 911 mg/l

#### Toxicity to Micro-organisms

IC50; bacteria: > 1,000 mg/l

### **Potassium Hydroxide**

This material is alkaline and may raise the pH of surface waters with low buffering capacity.

This material has exhibited moderate toxicity to aquatic organisms.

#### Freshwater Fish Toxicity:

LC50 (Mosquito fish): 80 mg/l/96 hr (static bioassay in fresh water at 18-19 C)

LC50 (Fathead Minnow): 179 mg/L/96 hr (static at 22.3-24.7 C)

#### Invertebrate Toxicity:

EC50 (*Daphnia magna*): 60 mg/L/48 hr (static bioassay at 20.3-20.7 C)

#### Algae Toxicity:

ErC50 (*Selenastrum capricornutum*): 61 mg/L/96 hr (static bioassay at 23-23.9 C)

#### FATE AND TRANSPORT:

**BIODEGRADATION:** This material will disassociate into ionic form in the aquatic environment.

Natural carbon dioxide will slowly neutralize this material.

**BIOCONCENTRATION:** This material will not bioconcentrate.

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### **SECTION 13. DISPOSAL CONSIDERATIONS**

Do not dispose of on the land, in surface waters, or in storm drains. Small spills and waste may be flushed into a waste treatment sewer where local regulations permit. Larger quantities should be collected for reuse or consigned to a licensed hazardous waste hauler for disposal in accordance with federal, state and local regulations. **All disposal must be in accordance with all federal, state and local regulations.**

### **SECTION 14. TRANSPORTATION**

No restrictions for Ground, Air, or Maritime Transportation in accordance with 49 CFR parts 100-185.

### **SECTION 15. REGULATORY INFORMATION**

#### **US Federal Regulations:**

All components are listed on TSCA

SARA - Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 –Glycol Ether EB Listed.

### **SECTION 16. OTHER INFORMATION**

This product has no established regulatory information. All regulatory information given is based on individual components of the mixture by component number. While this information and recommendations set forth herein are believed to be accurate and reliable, it is provided without warranty regarding its accuracy. BRIDGEPOINT SYSTEMS MAKES NO WARRANTY WITH RESPECT HERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON. Users must determine safe conditions for use and assume liability for any loss, injury, damage or expense resulting from use of this product.

N/A= Not applicable N/D= Not determined N/E= Not established