



# MSDS G22

Supercedes MSDS G22 & G35  
with 8-06-1998 effective date.

This Material Safety Data Sheet applies to the following Baldwin Filters Part Numbers:

**CS5007**  
**CS5055**  
**CS5057**  
**CS5058**

## BetzDearborn Material Safety Data Sheet

Effective Date: 06-AUG-1998

Printed Date: 09-FEB-1999

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## 1) Chemical Product and Company Identification

Product Name: ENDCOR 4739 & BetzDearborn TR84739

Production Application Area: A Closed Cooling Water Corrosion Treatment

Company Address:

BetzDearborn

4636 Somerton Road, Treose, PA 19053

Information Phone Number - (215) 355-3300

Emergency Telephone (Health/Accident): (800) 877-1940 (USA)

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## 2) Composition/Information On Ingredients

Information for specific product ingredients as required by the U.S. OSHA Hazard Communication Standard is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

### HAZARDOUS INGREDIENTS

CAS#	Chemical Name
7758-09-0	Potassium Nitrite: Oxidizer; toxic (by ingestion); irritant; potential blood toxin
1310-58-3	Potassium Hydroxide (Caustic Potash): Corrosive; toxic (by ingestion)
7757-79-1	Potassium Nitrate: Oxidizer; potential blood toxin, reproductive toxin, and neurotoxin
7631-95-0	Sodium Molybdate (Molybdic Acid, Disodium Salt): Potential irritant (respiratory)

No component is considered to be a carcinogen by the National Toxicology Program, the International Agency for Research on Cancer, or the Occupational Safety and Health Administration at OSHA thresholds for carcinogens.

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## 3) Hazards Identification

### EMERGENCY OVERVIEW

**DANGER:** May cause slight irritation to the skin. Severe irritant to the eyes. Mists/aerosols may cause irritation to upper respiratory tract.

**DOT Hazard:** Not Applicable

**Emergency Response Guide:** Not Applicable

**Odor:** Slight

**Appearance:** Colorless To Yellow, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

**Proper Fire-Extinguishing Media:** dry chemical, carbon dioxide, foam or water

## POTENTIAL HEALTH EFFECTS

<b>Acute Skin Effects:</b>	Primary route of exposure; May cause slight irritation to the skin.
<b>Acute Eye Effects:</b>	Severe irritant to the eyes.
<b>Acute Respiratory Effects:</b>	Mists/aerosols may cause irritation to upper respiratory tract.
<b>Ingestion Effects:</b>	May cause gastrointestinal irritation.
<b>Target Organs:</b>	Prolonged or repeated exposures may cause toxicity to the blood.
<b>Medical Conditions</b>	
<b>Aggravated:</b>	Not Known
<b>Symptoms of Exposure:</b>	May cause redness or itching of skin, irritation, and/or tearing of eyes (direct contact).

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## 4) First Aid Measures

<b>Skin Contact:</b>	Remove contaminated clothing. Wash exposed area with a large quantity of soap solution or water for 15 minutes.
<b>Eye Contact:</b>	Immediately flush eyes with water for 15 minutes. Immediately contact a physician for additional treatment.
<b>Inhalation:</b>	Remove victim from contaminated area to fresh air. Apply appropriate first aid treatment as necessary.
<b>Ingestion:</b>	Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Dilute contents of stomach using 3-4 glasses milk or water.

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## 5) Fire Fighting Measures

<b>Fire Fighting Instructions:</b>	Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).
<b>Extinguishing Media:</b>	Dry chemical, carbon dioxide, foam or water
<b>Hazardous Decomposition</b>	
<b>Products:</b>	Thermal decomposition (destructive fires) yields elemental oxides.
<b>Flash Point:</b>	> 200F > 93C P-M(CC)

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## 6) Accidental Release Measures

**Protection and Spill Containment:** Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Flush area with water. Wet area may be slippery. Spread sand/grit.

**Disposal Instructions:** Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product is - incinerate or land dispose in an approved landfill.

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## 7) Handling and Storage

**Handling:** Contains an oxidizer. Avoid all contact with reducing agents, oils, greases, organics and acids. Do not allow to dry.

**Storage:** Keep containers closed when not in use. Reasonable and safe chemical storage. Protect from freezing.

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## 8) Exposure Controls/Personal Protection

### EXPOSURE LIMITS

Chemical Name	PEL (OSHA)	TLV (ACGIH)
Potassium Nitrite.....	Not Determined.....	Not Determined
Potassium Hydroxide (Caustic Potash) .....	2 mg/m3 (Ceiling).....	2 mg/m3 (Ceiling)
Potassium Nitrate.....	Not Determined.....	Not Determined
Sodium Molybdate (Molybdic Acid, Disodium Salt) .....	5 mg/m3 (AS Mo).....	5 mg/m3 (AS Mo)

**Engineering Controls:** Adequate ventilation to maintain air contaminants below exposure limits.

**Personal Protective Equipment:** Use protective equipment in accordance with 29 CFR 1910 Subpart 1  
**Respiratory Protection:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. Use air purifying respirators within use limitations associated with the equipment or else use supplied air respirators. If air purifying respirator use is appropriate, use a respirator with dust/mist filters.  
**Skin Protection:** Neoprene gloves. Wash off after each use. Replace as necessary.  
**Eye Protection:** Splash proof chemical goggles.

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## 9) Chemical and Physical Properties

Specific Grav. (70F, 21C) .....	1.152	Odor .....	Slight
Freeze Point (F).....	10	Appearance.....	Colorless to Yellow
Freeze Point (C).....	-12	Physical State .....	Liquid
Viscosity (cps 70F, 21C).....	10	Flash Point P-M(CC) .....	> 200F > 93C
Vapor Pressure (mmHG).....	~ 18.0	pH As Is (Approx.) .....	10.4
Vapor Density (air=1) .....	< 1.00	Evaporation Rate (Ether = 1) .....	< 1.00
% Solubility (water).....	100.0		

NA = Not Applicable  
ND = Not Determined

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## 10) Stability and Reactivity

**Stability:** Stable under normal storage conditions.  
**Hazardous Polymerization:** Will not occur.  
**Incompatibilities:** May react with strong oxidizers.  
**Decomposition Products:** Thermal decomposition (destructive fires) yields elemental oxides.  
**BetzDearborn Internal Pumpout /Cleanout Categories:** "B"

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## 11) Toxicological Information

**Oral LD50 RAT:** > 2,000 mg/kg (NOTE: Estimated Value)  
**Dermal LD50 RABBIT:** > 2,000 mg/kg (NOTE: Estimated Value)

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## 12) Ecological Information

**Aquatic Toxicology:** No Data Available.  
**Biodegradation:** No Data Available.

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## 13) Disposal Considerations

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is: Not Applicable.  
Please be advised, however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

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## 14) Transport Information

**DOT Hazard**.....NA  
**UN / NA Number** ..... NA || **DOT Emergency Response Guide #**..... | NA |

## 15) Regulatory Information

**TSCA:** All components of this product are listed in the TSCA Inventory.

**CERCLA and/or SARA Reportable Quantity (RQ):** 5,387 Gallons due to Potassium Hydroxide (Caustic Potash).

**SARA Section 312 Hazard Class:** Immediate (acute); Delayed (Chronic)

**SARA Section 302 Chemicals:** No regulated constituent present at OSHA thresholds.

**SARA Section 313 Chemicals:**

CAS #	Chemical Name	Range
7757-79-1	Potassium Nitrate	2.0-5.0%

### California Regulatory Information

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65) Chemicals Present: No regulated constituent present at OSHA thresholds.

### Michigan Regulatory Information

No regulated constituent present at OSHA thresholds.

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## 16) Other Information

NFPA/HMIS.....Code	Code Translation
Health.....1	Slight Hazard
Fire.....1	Slight Hazard
Reactivity.....0	Minimal Hazard
Special.....NONE	No Special Hazard
(1) Protective Equipment.....B	Goggles, Gloves

(1) Refer to Section 8 of this MSDS for additional protective equipment recommendations.



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