



MATERIAL SAFETY DATA SHEET

BFX All-Purpose Cleaner

Revision 3

Revision Date: 8/5/08

Supersedes: 2/14/03

Section 1 • Product and Company Identification

Product Name:	BFX All-Purpose Cleaner
Part Number:	05528, 05501, 05505, 05555, C05528,C05501,C05505,C05555
Chemical Name:	Alkaline, aqueous solution
Product Use:	An all-purpose, industrial, water-based cleaner designed to remove dirt, grease, and oil from machinery and equipment.
Manufacturer Information:	LPS Laboratories, 4647 Hugh Howell Rd., Tucker, GA, USA 30084
TEL:	1 770-243-8800
Emergency Telephone Number:	1-800-424-9300 Chemtrec; Outside U.S.: (703) 527-3887
FAX:	1 770-243-8899
Website:	http://www.lpslabs.com

PLAIN LANGUAGE HAZARD SUMMARY

Material Safety Data Sheets can be confusing. Federal and State laws require us to include a great deal of technical information that probably won't help the non-professional. LPS includes this "PLAIN LANGUAGE HAZARD SUMMARY" to address the questions and concerns of the average worker. If you have additional health, safety or product questions, don't hesitate to call us at 800/241-8334.

Worker Toxicity

BFX All-Purpose Cleaner is an industrial chemical. It is a specialized water-based cleaner designed to remove dirt, grease, and oil from machinery and equipment. It contains ethoxylated alcohols; Avoid extended exposure to unprotected skin. Don't get it in your eyes (it stings), or breathe heavy mist (if working with pressure washing equipment in poorly ventilated areas). For more exposure and first aid information, refer to MSDS Sections 2, 8 and 11.

Flammability

BFX All-Purpose Cleaner is non-flammable under nearly all conditions.

Disposal

BFX All-Purpose Cleaner is quite alkaline, even after dilution in water. However, after the product has been exhausted in a typical cleaning process, its pH level will be significantly reduced, and in some extreme cases may essentially be neutral. In most cleaning operations, suitability for disposal is determined not just by pH level but by the end-user's ability to separate suspended oil from the water. Levels of acceptable oil remaining in the spent cleaning solution can vary from one local jurisdiction to another. Consult your local P.O.T.W. (Publicly Owned Treatment Works) for instructions on how to dispose of spent cleaning solution down sanitary sewer lines. Also, see section 13 for additional disposal information.



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Section 2 • Hazards Identification

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Emergency Overview: **CAUTION:** Mild Eye Irritant.

Primary route(s) of entry: Skin and Eye contact.

Potential Acute Health Effects:

Eyes: Irritating to eyes.

Skin: Repeated exposure may cause skin dryness or cracking.

Inhalation: Inhalation of large quantities of spray mist may cause irritation of the respiratory tract.

Ingestion: Product has a low order of acute oral toxicity, but ingestion of large quantities may cause nausea, vomiting, and gastrointestinal irritation.

Potential Chronic Health Effects:

Carcinogenic Effects: NTP: No IARC: No OSHA: No

Mutagenic Effects: None

Teratogenic Effects: None

Medical conditions aggravated by exposure: Persons with pre-existing skin disorders or chronic respiratory diseases should avoid exposure.

Signs and Symptoms

Stinging in eyes. Repeated or prolonged skin contact can cause redness, irritation, and scaling of the skin (dermatitis). Breathing of high mist concentrations may cause irritation of throat and eyes.

Section 3 • Composition / Information on Ingredients

Component	CASRN	Weight Percent
Alcohols, C10-16,ethoxylated	68002-97-1	5 - 10%
Dipropylene Glycol Monomethyl Ether	34590-94-8	1 - 5 %
Sodium Citrate	68-04-2	1 - 5%

*The remaining ingredients are not classified as hazardous per 29 CFR 1910.1200 Subpart Z



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Section 4 • First Aid Measures

- Eyes:** Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. Do not use eye ointment. Seek medical attention immediately.
- Skin:** Remove contaminated shoes and clothing. Clean affected area thoroughly with mild soap and water. Do not use ointments. Seek medical attention if irritation persists.
- Inhalation:** Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, seek medical attention immediately.
- Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Do not leave victim unattended. Seek medical attention immediately.

Section 5 • Fire Fighting Measures

Products of Combustion: Carbon dioxide and carbon monoxide.

General Fire Hazards: High heat will cause product to boil, evolving vapor that could cause explosive rupture of closed containers.

Firefighting media: SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Cool containing vessels with water jet in order to prevent pressure build-up, auto ignition or explosions.

Sensitivity to Impact: None **Sensitivity to Static Discharge:** None

Protection Clothing (Fire): None.

Special Remarks on Explosion Hazards: None.

Section 6 • Accidental Release Measures

- | | | |
|-------------------------------|--|--|
| Containment Procedures | Small Spill and Leak: | Absorb with an inert material and dispose of properly. |
| | Large Spill and Leak: | Ventilate area. Block the path of any flowing material using soil, gravel, or other readily available material. Absorb with dry earth, sand or other non-combustible material and dispose of properly. |
| Clean-Up Procedures | Recover free product and place in suitable container for disposal. | |
| Evacuation Procedures | Ventilate area of leak or spill. Keep unnecessary and unprotected people away. | |
| Special Procedures | Wear appropriate protective equipment during cleanup. | |



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Section 7 • Handling and Storage

Handling: After handling, always wash hands thoroughly with soap and water. Use only with adequate ventilation. Avoid skin and eye contact. Avoid breathing vapors or spray mists.

Storage: Keep container in a cool, well-ventilated area. Store between 32°F and 120°F.

Precautions to be taken in handling and storage: Store all materials in dry, well-ventilated area. Avoid skin and eye contact. Avoid breathing vapors.

Section 8 • Exposure Controls / Personal Protection

Exposure Guidelines:

Component	CASRN	OSHA TWA-PEL	OSHA STEL	ACGIH TLV	ACGIH STEL	NIOSH
Dipropylene Glycol Monomethyl Ether	34590-94-8	100 ppm	150 ppm CANADA	100 ppm	150 ppm	100 ppm TWA 150 ppm STEL
Alcohols, C10-16, ethoxylated	68002-97-1	Not Established	Not Established	Not Established	Not Established	Not Established
Sodium Citrate	68-04-2	Not Established	Not Established	Not Established	Not Established	Not Established

Engineering Controls: Provide general and/or local exhaust ventilation to keep exposures below the exposure guidelines.

Personal Protection:

Eyes: Safety glasses with side shields conforming to appropriate regulations. Eye wash fountain and emergency shower facilities are recommended.

Respiratory: If airborne concentrations are above the applicable exposure limits (listed above), use NIOSH approved respiratory protection.

Hands: Use chemically resistant gloves (i.e., nitrile). Please observe the instructions regarding permeability and breakthrough time that are provided by the supplier of the gloves. Take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion and the contact time.

General Hygiene Considerations: Wash thoroughly after handling. Have eye-wash facilities immediately available.



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Section 9 • Physical and Chemical Properties

Appearance:	Liquid.	Color:	Purple
Odor/Taste:	Sassafras	Vapor Pressure:	Not Established
Solubility Description:	> 99% in water	Evaporation Rate:	1 (H ₂ O=1)
Boiling Point :	~100°C at 760mmHg	Flash Point:	None
Specific Gravity (Water=1):	1.01–1.03 at 20°C	Flash Point Method:	TCC
Vapor Density (air=1):	>1	Auto Ignition Temperature:	Not Applicable
V.O.C. Content:	4.0%, 41 g/L, 0.3 #/gal per CARB/OTC	Partition Coefficient (oct/water):	> 1.0
Flammable limits (estimated):	Not Applicable	Viscosity:	<3 centistokes at 25°C
pH:	11.0 – 11.5		

Section 10 • Stability and Reactivity

Chemical Stability:	Product is stable under recommended storage conditions.
Conditions to Avoid:	Avoid substances that react with water. Extreme heat or freezing.
Incompatibility:	Reactive or incompatible with oxidizing agents.
Hazardous Decomposition:	These products are carbon oxides (CO, CO ₂)
Hazardous Polymerization:	Will not occur.

Section 11 • Toxicological Information

Acute and Chronic Toxicity

A: General Product Information

An acute toxicity study of this product has not been conducted. Information given in this section relates only to individual constituents contained in this preparation.

B: Component Analysis

Component	CASRN	LC-50	LD-50
Dipropylene Glycol Monomethyl Ether	34590-94-8	Not Established	5135 mg/kg/oral/rat* 9500 mg/kg/dermal/rabbit*
Alcohols, C10-16,ethoxylated	68002-97-1	0.22-8 mg/L/4H/rat*	1000 mg/kg/oral/rat* 3870-8000 mg/kg/dermal/rabbit*
Sodium Citrate	68-04-2	Not Established	Not Established

* Supplier Data



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Section 12 • Ecological Information

Mobility: May adsorb to sediments **Persistence and degradability:** Biodegradable.

Bioaccumulative potential: No bioaccumulation potential

Ecotoxicity:

Effect on Organisms	Component	CASRN	Test	Species	Results
Acute Toxicity on Fishes	Dipropylene Glycol Methyl Ether	34590-94-8	Acute LC ₅₀	Pimephales promelas	>10,000 mg/L
	Alcohols, C10-16,ethoxylated	68002-97-1	96-hr LC ₅₀	Guppy	6.5 mg/L
Acute Toxicity on Daphnia	Dipropylene Glycol Methyl Ether	34590-94-8	Acute LC ₅₀	Daphnia magna	1919 mg/L
	Alcohols, C10-16,ethoxylated	68002-97-1	96-hr EC ₅₀	Daphnia magna	2.32 mg/L
Bacterial inhibition	Dipropylene Glycol Methyl Ether	34590-94-8	EC ₅₀	Bacteria	4168 mg/L
Growth inhibition of algae	Dipropylene Glycol Methyl Ether	34590-94-8	EC ₅₀	Selenastrum Capricorniumutum	>969 mg/L
	Alcohols, C10-16,ethoxylated	68002-97-1	72-hr EbC ₅₀	S. subspicatus	2.7 mg/L
Bioaccumulation in fish	No Data Available				

Section 13 • Disposal Considerations

Waste Status: None.

Disposal: Waste must be disposed of in accordance with federal, state, provincial, and local environmental control regulations.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive than federal laws and regulations.

Section 14 • Transport Information

This product is not regulated by any mode of transportation.



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Section 15 • Regulatory information

U.S. Federal Regulations

RCRA Hazardous Waste No.: None

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): This product contains no Reportable Quantity (RQ) Substances.

Toxic Substances Control Act (TSCA):

All components of this product are TSCA inventory listed and/or are exempt.

Superfund Amendments and Reauthorization Act (SARA) Title III

SARA Section 311/312 (40 CFR 370) Hazard Categories: Immediate (Acute) Health Hazard

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Title III Section 313 (40 CFR 372): None

Section 112 Hazardous Air Pollutants (HAPs): None

State Regulations

New Jersey Right to Know: Water 7732-18-5 • Dipropylene Glycol Methyl Ether 34590-94-8 • C10 – C16 Ethoxylated Alcohol 68002-97-1 • Sodium Citrate 68-04-2 • Sodium Carbonate 497-19-8 •

California: This product does not contain chemical(s) known to the State of California to cause cancer, birth defects or reproductive harm.

California and OTC States: This product conforms to consumer regulations.

International Regulations

Canadian Environmental Protection Act: All of the components of this product are included on the Canadian Domestic Substances list (DSL).

Canadian Workplace Hazardous Materials Information System WHMIS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Classification:

Class D2B





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Other Regulations

Montreal Protocol listed ingredients: None.
Stockholm Convention listed ingredients: None.
Rotterdam Convention listed ingredients: None.
RoHS Compliant: Yes.

Section 16 • Other Information

MSDS#15528 Responsible Name: Clea Johnson Regulatory Affairs Coordinator	HMIS 1996		HMIS III		NFPA Flammability  Health Reactivity
	Health:	1	Health:	[1]	
	Flammability:	0	Flammability:	0	
	Reactivity:	0	Physical Hazard	0	

Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Clea L Johnson, Regulatory Affairs Coordinator
LPS Laboratories
A division of Illinois Tool Works