



**Page 1 of 5**  
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P & G Household Care  
Fabric & Home Care Innovation Center  
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## MATERIAL SAFETY DATA SHEET

MSDS: RQ0904760  
RQ0904762

Issue Date: 5/25/2010

### SECTION I - PRODUCT IDENTIFICATION

Identity: **Liquid Laundry Detergent** (All 2X Concentrated Variations for Retail\*)

**This MSDS applies to the following Liquid 2X Dreft Ultra Detergent Brands:**

**Dreft**

**Dreft High Efficiency**

Emergency Telephone Number: 24hr P&G Operator – 1-800-879-8433

\* **This MSDS applies to** all uses/handling of these products in a retail package for consumer home use.

### SECTION II - HAZARDS IDENTIFICATION

**Health Hazards (Acute and Chronic):**

Ingestion: May cause transient gastrointestinal irritation.  
Eye Contact: May cause mild, transient irritation.  
Inhalation: Transient irritation with prolonged exposure to concentrated material.

**Signs and Symptoms of Exposure:**

Ingestion: May result in nausea, vomiting, and/or diarrhea.  
Eye Contact: May cause stinging, tearing, itching, swelling, and/or redness.  
Skin: Prolonged contact with concentrated material may be drying or transiently irritating to skin.

SECTION III - COMPOSITION AND INGREDIENTS				
Ingredients/Chemical Name: Biodegradable surfactants (anionic and nonionic) and enzymes.				
Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200.				
Common Name	Chemical Name	CAS No.	Composition Range	LD50
Ethanol	Ethyl alcohol	64-17-5	1 - 5%	7.06 g/kg (oral, rat)
Ethanolamine	2-Aminoethanol	141-43-5	1 - 5%	1.7g/kg (oral, rat)
Anionic Surfactants	Alcohol Ethoxysulfate, sodium salt	68585-34-2	10-30% total anionic surfactant	>2g/kg (oral, rat)
	Alcohol Sulfates, sodium salts	68585-47-7		>2000 mg/kg (oral, rat)
	Benzene sulfonic acid, monoethanolamine salt	68910-32-7		not available

SECTION IV - FIRST AID INFORMATION	
<b>Emergency and First Aid Procedures:</b>	
Ingestion:	Drink a glassful of water.
Eye Contact:	Flush with water for 10 to 15 minutes.
Skin:	If prolonged contact occurs, rinse thoroughly with water. If spilled on clothing, change clothes.
If symptoms persist or reoccur, seek medical attention.	
<b>Other:</b> Consumer product package has a caution statement: "CAUTION: Eye irritant. Harmful if swallowed. KEEP OUT OF REACH OF CHILDREN. If swallowed, give a glassful of water. Call a physician. In case of eye contact, flush with water."	

SECTION V - FIRE FIGHTING INFORMATION	
<b>Flammable Properties:</b> These products have a flashpoint of $\geq 150^{\circ}\text{F}$ and they do not sustain combustion per D.O.T. 49 CFR 173 Appendix H method.	<b>Explosive Limits:</b> LEL: N/A UEL: N/A
	<b>Autoignition Temperature:</b> N/A
<b>Suitable Extinguishing Media:</b> CO <sub>2</sub> , water, foam, dry chemical.	
<b>Unsuitable Extinguishing Media:</b> Not known.	
<b>Protection of Fire Fighters:</b>	
- <b>Specific Hazards arising from the chemical mixture:</b> Not known.	
- <b>Protective Equipment and Precautions for Firefighters:</b> Standard self-contained breathing apparatus (SCBA) and full fire fighting turn-out gear (Bunker gear).	



**SECTION X - STABILITY AND REACTIVITY**

**Chemical Stability:** Stable.  
**Conditions to Avoid:** None known.  
**Materials to Avoid:** None known.  
**Hazardous Decomposition Products:** None known.  
**Possibility of Hazardous Reactions:** None known.

**SECTION XI - TOXICOLOGICAL INFORMATION**

Liquid Dreft formulas have a low order of toxicity. If ingested, it may be mildly irritating. It is expected to be moderately emetic.

LD50 (oral, estimated): > 2g/kg  
ED50 (emesis, estimated): ~ 0.5 g/kg

Chronic Effects: No chronic health effects reported.

Target Organs: No target organs reported.

Carcinogenicity: NTP: No  
IARC: No  
OSHA: No

**SECTION XII - ECOLOGICAL INFORMATION**

Based on ecotoxicity and fate data for the individual ingredients in these mixtures, and for related consumer household cleaning product formulations, it is expected that these mixtures would exhibit a non-hazardous order of toxicity at relevant environmental concentrations.

**SECTION XIII - DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Products covered by this MSDS, in their original form, when disposed as waste, are considered non hazardous waste according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with all Federal, state/provincial and local regulations.

**Household Use:** Consumer produced household solutions may be disposed of down the drain with running water. Consumer may discard empty container in trash, or recycle where facilities exist.

**SECTION XIV - TRANSPORT INFORMATION**

US DOT: These products are not regulated when transported by ground.  
IATA: These products are not regulated when transported by air.  
IMDG: These products are not regulated when transported by vessel.

