



## MATERIAL SAFETY DATA SHEET

MSDS / CT#: FH/H/2002/MSMM-5EBSAY Issue Date: 10/16/02  
 Supersedes: FH/H/2002/MSMM-573JC3(S)  
 FH/H/2001/TNTE-54FUTR

SECTION I - CHEMICAL PRODUCT		
Identity: <b>Liquid Laundry Detergent</b>		
Brands: <b>GAIN</b>		(All variations)
Hazard Rating: 1	Health: 1	4=EXTREME
	Flammability: 1	3=HIGH
	Reactivity: 0	2= MODERATE
		1=SLIGHT
Emergency Telephone Number: 1-800-888-4246 or call Local Poison Control Center		

SECTION II - COMPOSITION AND INGREDIENTS					
Ingredients/Chemical Name: Biodegradable surfactants (anionic and nonionic) and enzymes.					
Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200.					
Chemical Name	Common Name	CAS No.	Recommended Limits	Composition Range	LD50/LC50
Ethyl alcohol	Ethanol	64-17-5	ACGIH TWA: 1880 mg/m <sup>3</sup> OSHA PEL & TWA: 1900 mg/m <sup>3</sup>	1 – 5%	7.1g/kg (rats, oral)
2-Aminoethanol	Ethanolamine	141-43-5	ACGIH TWA: 7.5 mg/m <sup>3</sup> ACGIH STEL: 15 mg/m <sup>3</sup> OSHA PEL: 6 mg/m <sup>3</sup> OSHA TWA: 8 mg/m <sup>3</sup> OSHA STEL: 15 mg/m <sup>3</sup>	1 – 5%	10.2g/kg (rats, oral)

SECTION III - HAZARDS IDENTIFICATION	
<b>Health Hazards (Acute and Chronic):</b>	
Ingestion:	May cause transient gastrointestinal irritation.
Eye Contact:	Contact may cause mild, transient irritation.
Skin:	Prolonged/repeated contact may cause irritation.
Inhalation:	None.
<b>Signs and Symptoms of Exposure:</b>	
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.
Inhalation:	None.

**SECTION IV - FIRST AID INFORMATION****Emergency and First Aid Procedures:**

Ingestion: If swallowed, give 2 glasses of water.  
 Eye Contact: Flush eyes with water for 15 minutes.  
 Skin: Rinse exposed area with water. If spilled on clothing, change clothes.  
 Inhalation: None.  
 If symptoms persist or reoccur, seek medical attention.

**Other:** 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**

**Flash Point (Method Used):** >200°F PM CC      **Explosive Limits:**      *LEL:* N/A      *UEL:* N/A

**Extinguishing Media:** CO<sub>2</sub>, water

**Special Fire Fighting Procedures:** None.

**Unusual Fire Hazards:** None. This product has a flash point above 200°F. It is an aqueous solution containing ethyl alcohol and it does not sustain combustion.

**Stability**                      *Unstable:*                      *Conditions to Avoid:* None  
    *Stable:* X

**Incompatibility (Materials to Avoid):** None known

**Hazardous Decomposition/By Products:** None known

**Hazardous Polymerization:**      *May Occur:*                      *Conditions to Avoid:* None  
    *Will Not Occur:* X

**SECTION VI - ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** None

**Environmental Precautions:** DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL REGULATIONS. Small or household quantities may be disposed of in refuse or in sewer. First check with your local water treatment plant. For larger quantities, incineration is preferred. Do not landfill.

**Steps To Be Taken in Case Material is Released or Spilled:** Flush small or household quantities down acceptable sewer (contains biodegradable surfactants). Prevent spills from reaching a waterway. Sorbents may be used.

**SECTION VII - HANDLING AND STORAGE**

**Precautions To Be Taken in Handling and Storing:** Store in a cool dry, ventilated area.

**Other Precautions:** None

**SECTION VIII - EXPOSURE CONTROLS, PERSONAL PROTECTION**

**Respiratory Protection (Specify Type):** None required with normal use.

**Ventilation**     *Local Exhaust:* None required with normal consumer use.

*Special:* None

*Mechanical (General):* Normal/general dilution ventilation is acceptable.

*Other:* None

**Eye Protection:** None required with normal consumer use.

*Industrial Setting:* If a splash is likely, chemical goggles may be needed.

**Protective Gloves:** None required with normal use.

*Industrial Setting:* Protective gloves (rubber, neoprene) should be used for prolonged direct contact.

**Other Protective Equipment:** None required with normal use.

**SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES**

**Boiling Point °F:** 205°F-208°F

**Specific Gravity (H<sub>2</sub>O=1):** 1.05-1.06 g/cc

**Vapor Pressure (mm Hg):** <29.4

**Percent Volatile by Volume (%):** ~76.9-80.8% @ 105°C

**Vapor Density (Air=1):** Unknown

**Evaporation Rate (nBuOAc=1):** Unknown

**Odor Threshold:** N/A

**Freezing Point:** N/A

**Coefficient of Water/Oil Distribution:** N/A

**pH (10% solution):** 8.1 to 8.5

**Scooped Density:** N/A

**Solubility in Water:** Completely soluble.

**Appearance and Odor:** Blue color, product is perfumed.

**Reserve Alkalinity:** N/A

**SECTION X - STABILITY AND REACTIVITY**

**Possible Hazardous Reactions/Conditions:** None known

**Conditions to Avoid:** None

**Materials to Avoid:** None

**Hazardous Decomposition Products:** None known

**Other Recommendations:** None

**SECTION XI - TOXICOLOGICAL INFORMATION**

LD50 (rats, oral): 3.3g/kg

ED50: 0.5g/kg

**SECTION XII - ECOLOGICAL INFORMATION**

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

**SECTION XIII - DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Disposal is to be performed in compliance with all Federal, state and local regulations. Small or household quantities may be disposed of in refuse or in sewer. First check with your local water treatment plant. For larger quantities, incineration is preferred. Do not landfill.

