



Chemical Specialties Manufacturing Corporation

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MATERIAL SAFETY DATA SHEET

(Prepared according to 29 CFR 1910.1200)

Degree of hazard: 4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Insignificant

Health: 1 Flammability: 0 Reactivity: 0

SECTION I: PRODUCT IDENTIFICATION

PRODUCT NAME: Liquid Formula 77

DATE REVIEWED: December 4, 2009

DOC CODE: W.20290

CHEMICAL FAMILY: Mixture

EMERGENCY 24-HOUR TELEPHONE # 1-800-424-9300 (CHEMTREC)

N/A = Not applicable or Not available.

N/D = Not determined.

SECTION II: COMPOSITION/ INFORMATION ON INGREDIENTS

This product has not been tested as a whole for health effects on animals or humans. According to the OSHA Hazardous Communications Standard (29 CFR 1910.1200) any hazardous ingredients that comprise >1.0% of the material and any carcinogenic ingredients that comprise >0.1% must be listed on the MSDS. When individually tested at 100% ingredients in the make-up of this product posed the following health hazards. This product is further diluted at use.

SECTION II a: HAZARDOUS INGREDIENTS >1.0%

Chemical Name	CAS #	OSHA PEL	ACGIH TLV	Percentage
Tetrasodium Ethylenediaminetetraacetate	64-02-8	N/A	N/A	1-10%
Sodium Carbonate	497-19-8	15 m/m ³	N/A	1-10%
Sodium Xylene Sulphonate	1300-72-7	N/A	N/A	11-20%
Sodium Olefin Sulfonate	68439-57-6	N/A	NA	1-10%
Phosphate Ether	68130-47-2	N/A	N/A	1-10%
Ethoxylated Alcohol	160875-66-1	N/A	N/A	1-10%
Alcohols (C12-15) Ethoxylate	68131-39-5	N/A	N/A	10-20%

SECTION II b: CARCINOGENIC INGREDIENTS AT >0.1%

None.

SECTION III: HAZARDS IDENTIFICATION

EYES: May cause eye irritation.
SKIN: May cause skin irritation.
INHALATION: None expected if used as directed.
INGESTION: May cause abdominal discomfort, nausea and diarrhea.

SECTION IV: FIRST AID PROCEDURES

EYES: Remove contacts. Flush with water for at least 15 minutes. If irritation persists consult physician.
INGESTION: Drink 1 to 2 glasses of water. If discomfort persists, consult physician.
INHALED: Remove to fresh air. If symptoms persist or are severe seek prompt medical assistance.
SKIN: Remove contaminated clothing. Thoroughly wash exposed area with soap and water.
PHYSICIAN: Treatment based on judgment of attending physician.

SECTION V: FIRE AND EXPLOSION DATA

FLASH POINT: >200°F (>93.3°C)

AUTO-IGNITION TEMPERATURE: N/D

EXPLOSIVE LIMITS - UEL: N/D **LEL:** N/D

EXTINGUISHING MEDIA: Any standard extinguishing media (alcohol foam, water spray or fog, CO₂ dry chemical, etc.).

SPECIAL FIRE FIGHTING PROCEDURES: Use NIOSH/MSHA approved self-contained positive pressure breathing apparatus and protective clothing where this material is involved in a fire.

UNUSUAL FIRE AND EXPLOSION HAZARD: None known.

SECTION VI: ACCIDENTAL RELEASE MEASURES

Soak up spilled material with absorbent material. Scoop or sweep and dispose according to local, state and federal regulations.

SECTION VII: HANDLING AND STORAGE

Avoid heat, flame, and sparks. Keep container closed to avoid contamination.

SECTION VIII: PROTECTION MEASURES

VENTILATION: Local exhaust or dilution ventilation is necessary in poorly ventilated areas.

GLOVES: Chemical resistant gloves.

RESPIRATORY: When mists or aerosols are anticipated, wear NIOSH/MSHA approved respirator equipped with organic vapor cartridges with high-efficiency particulate filters.

EYE: Safety glasses. Wear splash goggles when mists or aerosols are anticipated.

OTHER PROTECTIVE EQUIPMENT: Body-covering clothing should be worn.

SECTION IX: PHYSICAL/CHEMICAL DATA

APPEARANCE AND ODOR: Clear yellow liquid with citrus odor.

% VOLATILE BY WT.: <5%

SPECIFIC GRAVITY: 1.109 g/cc

WATER SOLUBILITY, % BY WT: N/D

pH: 10.8 – 11.8

WT/GAL: 9.24 lbs/gal

SECTION X: REACTIVITY DATA

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITY: Strong oxidizers and strong acids.

HAZARDOUS DECOMPOSITION/COMBUSTION PRODUCTS: Oxides of carbon, sodium, sulfur and possibly other unidentified organic compounds.

SECTION XI: TOXICOLOGICAL INFORMATION OF INGREDIENTS

Tetrasodium Ethylenediaminetetraacetate: LD50 oral rat: 1000-2000 mg/kg.

Sodium Carbonate: LD50 oral rat: 4090 mg/kg.

Sodium Olefin Sulfonate: LD50 oral rat: 500-5000 mg/kg. LD50 dermal rabbit: 400-2000 mg/kg.

Ethoxylated Alcohol: LD50: >500 mg/kg.

Alcohols Ethoxylate: LD50 oral rat: >500-5000 mg/kg.

SECTION XII: ECOLOGICAL INFORMATION

Product may not be completely biodegradable.

Tetrasodium Ethylenediaminetetraacetate: LC50 golden orfe (93hr): >500 mg/L. EC50 (48hr): >100 mg/L.

Sodium Carbonate: LD50 daphnia magna (96hr): 265 – 565 mg/L. LC50 bluegill sunfish (96hr): 300-320 mg/L.

Sodium Xylene Sulphonate: EC50 algae: >230 mg/L. EC50 daphnia magna: >1000 mg/L. LC50: >1000 mg/L.

Sodium Olefin Sulfonate: LC50 fish: 1-10 mg/L.

Ethoxylated Alcohol: EC50 daphnia magna (48hr): 10-100 mg/L. EC50 algae (72hr): 10-100 mg/L.

SECTION XIII: SPILL, LEAK AND DISPOSAL PROCEDURES

WASTE DISPOSAL: In accordance with Federal, state and local regulations.

NEUTRALIZING CHEMICALS: Water.

SECTION XIV: TRANSPORT INFORMATION PER 49 CFR 172.101

All ingredients used in this formula are non-regulated for non-bulk.

SECTION XV: REGULATORY INFORMATION

Domestic	International:
TSCA: All ingredients are listed on the TSCA chemical substance inventory. SARA Section 313 Ingredients: None. California Prop 65 Ingredients: None.	European labeling requirements: Symbol: Xi: Irritant. R-Sentences: R36, R38 S-Sentences: S2, S24, S25, S37, S39 Canadian: WHMIS Hazard Class: D2B.

SECTION XVI: OTHER INFORMATION

One should always use chemicals with awareness of potential hazards, known and unknown, and their effect on the human system. We urge users to minimize employee exposure to all chemicals, including this product and to keep the level of exposure commensurate with good industrial hygiene practices.

DISCLAIMER OF LIABILITY

The manufacturer and seller warrants that this product conforms to its standard specifications when used according to directions. As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material and the results to be obtained from the use thereof.