



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURING LOCATION:
 Rutland Plastic Technologies, Inc.
 10021 Rodney Street
 Pineville, NC 28134
 704/553-0046

HAZARDOUS MATERIAL INFORMATION SYSTEM:

Health:	2
Flammability:	2
Reactivity:	0
Personal Protection:	B

IN CASE OF EMERGENCY CONTACT: 704/553-0046

PRODUCT NAME: Liquid Thickener
CHEMICAL FAMILY: Urea Urethane
PRODUCT CODE: M00004

MSDS NUMBER: 61
DATE REVISED: 9/20/2010
SUPERSEDES: 7/28/2008

PREPARED BY: Kimberly C. Leitch (704) 553-0046 ext. 155

2. HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENT	CAS #	% BY WEIGHT	TLV	PEL
Lithium Chloride (LiCl)	7447-41-8	2		
1-Methyl-2-pyrrolidone (NMP)	872-50-4	48	10 ppm skin	

The above ingredients are defined as hazardous by OSHA 29 CFR 1910.1200.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Harmful if absorbed through skin. Avoid skin and eye contact. Avoid breathing heated vapors.
 Prolonged exposure to Lithium Chloride may cause kidney or blood disorders, and may be teratogenic. Reproductive and developmental studies in rats exposed to 1-Methyl-2-pyrrolidone (NMP) showed effects including reduced fertility and birth weight, and reduced offspring weight during lactation. The risk is significantly reduced when impervious gloves are used.

EYE CONTACT: Will probably cause irritation

3. HAZARDS IDENTIFICATION (CONTINUED)

SKIN CONTACT: May cause irritation. Skin absorption is possible.

INGESTION: May irritate digestive tract

INHALATION: None expected

4. FIRST AID MEASURES

EYES: Flush immediately with water for 15 minutes. Get medical attention.

SKIN: Remove contaminated clothing. Wash thoroughly with soap and water.

INHALATION: Remove to fresh air for relief. Get medical attention if necessary.

INGESTION: Do not induce vomiting. If victim is conscious, dilute with 1-2 glasses of water. Get medical attention.

MEDICAL CONDITIONS AGGRAVATED: Some skin conditions. Pre-existing kidney disorders

NOTE TO PHYSICIAN: None

5. FIRE FIGHTING MEASURES

FLASH POINT (° F): 196° F (PMCC)

OSHA FLAMMABILITY CLASSIFICATION: Combustible

EXTINGUISHING MEDIA: Foam, CO₂, or dry chemical

SPECIAL FIRE FIGHTING PROCEDURES: Wear full bunker gear and self-contained breathing apparatus. Water spray may be used to keep fire exposed containers cool.

EXPLOSION LIMITS IN AIR - LOWER (%): 1.3 **UPPER (%):** 9.5

AUTO IGNITION TEMP (° F): 473° F

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep away from heat or flames. Prevent static discharge. Keep away from oxidizing agents.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Eliminate all ignition sources. Ventilate area. Wear self-contained breathing apparatus and full protective clothing. Dike to contain spill. Pump into salvage tanks. Remove excess with absorbent materials using sparkless shovels.

7. HANDLING AND STORAGE

HANDLING:	Avoid skin and eye contact.
STORAGE:	Avoid heat, flame, and ignition sources. Ground drums to prevent static discharge. Keep away from strong oxidizers, acids, and alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:	Use good hygiene and safety practices.
RESPIRATORY PROTECTION EQUIPMENT:	If product is heated or sprayed, or if dust/mists/vapors are above the exposure limits, wear a NIOSH approved respirator.
PROTECTIVE GLOVES:	Butyl rubber recommended.
EYE AND FACE PROTECTION:	Goggles recommended.
OTHER PROTECTIVE EQUIPMENT:	Long sleeved and long legged work clothes.
VENTILATION:	Local exhaust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Range/Point:	395-401° F
Vapor Pressure @ 20° C:	<1.0000000 hPa (calculated)
Vapor Density (AIR=1):	Not available
Freezing Point:	Not available
Melting Point:	Not available
Physical State:	Liquid
Color:	Yellow
% Volatile by Weight:	50-58% Non-volatile
VOC (g/l):	Not available
Evaporation Rate (Butyl Acetate=1):	Not available
Specific Gravity @ 25° C:	1.13
Weight per gallon:	9.4

10. STABILITY AND REACTIVITY

STABILITY:	Stable
HAZARDOUS POLYMERIZATION:	Will not occur
HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS:	CO, CO ₂ , nitrous oxides, chlorinated compounds.
INCOMPATIBILITY (MATERIALS TO AVOID):	Strong oxidizers, acids and alkalis.
CONDITIONS TO AVOID:	Heat, flame, ignition sources, static discharge.

11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY: This product is not listed as a carcinogen by NTP, IARC, or OSHA.

TOXICITY DATA: Skin (rabbit): Mild skin irritation (product); Eye (rabbit): Mild eye irritation (product)

ACUTE ORAL LD50: >5000mg/kg (product)

ACUTE DERMAL LD50: 8000 mg/kg (1-methyl-2-pyrrolidone); >2,000 mg/kg (LiCl)

ACUTE INHALATION LC50: Not available

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Unknown

CHEMICAL FATE INFORMATION: Unknown

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of this material in accordance with all applicable local, state, and Federal regulations.

14. TRANSPORT INFORMATION

DOT SHIPPING NAME: Not regulated

DOT HAZARD CLASS:

UN/NA NUMBER:

DOT PACKING GROUP:

AIR FREIGHT TRANSPORTATION:

OCEAN TRANSPORTATION:

15. REGULATORY INFORMATION

TSCA STATUS: All components of this product are either listed on the TSCA Inventory, or are not subject to the notification requirements (exempt).

CALIFORNIA PROPOSITION 65: This product contains a chemical known to the state of California to cause cancer or birth defects.

SARA 302 EXTREMELY HAZARDOUS SUBSTANCES LIST: Not applicable

SARA (311,312) HAZARD CLASS: Acute, Chronic, Fire

SARA SECTION 313 TOXIC CHEMICALS: 1-Methyl-2-pyrrolidone CAS # 872-50-4 48%

15. REGULATORY INFORMATION (CONTINUED)

AUSTRALIAN INVENTORY CHEMICAL SUBSTANCES:	Unknown		
CANADIAN INVENTORY:	WHMIS: B3, D2A, D2B	EINECS REGULATIONS:	Unknown
JAPAN:	Unknown	KOREAN CHEMICAL INVENTORY:	Unknown

16. OTHER INFORMATION

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES:

All recommendations and statements made, if any, are based on Rutland's research and experience. However, since Rutland has no control over the conditions of use or storage of the product sold, Rutland cannot guarantee the results obtained through the use of its products. All products are sold and samples are given without any representation or warranty, expressed or implied, of fitness for any particular purpose or otherwise, and upon condition that the buyer shall determine the suitability of the product for its own purposes. This applies also where protective rights of third parties are involved. It does not release the user from the obligation to test the suitability of the product for the intended use and application.

17. LABEL INFORMATION

SINGLE WORD:	Combustible
TARGET ORGANS:	Harmful if absorbed through skin
EYES:	Eye Irritation
SKIN:	May cause skin irritation
CHRONIC EFFECTS:	Based on animal data, prolonged exposure may cause injury to kidney and blood. Based on animal data, possible developmental/fertility effects (LiCl/NMP).
INHALATION:	Avoid breathing heated vapors, use adequate ventilation.
HANDLING:	Avoid contact with skin, eyes, and clothing.
STORAGE:	Avoid heat, sparks, flame, or static discharge. Empty containers may hold combustible/harmful vapors. Exercise the same precautions as if the container were full. Avoid strong oxidizers, acids, alkalis.
ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:	Remove ignition sources. Dike to contain spill. Recover free product. Remove residue with absorbent materials with static free shovels.
EXTINGUISHING MEDIA:	Foam, CO ₂ , or dry chemical.
RIGHT-TO-KNOW CHEMICALS:	Lithium chloride (LiCl) 1-Methyl-2-pyrrolidone (NMP)