



## 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:**

<b>Health:</b>	<b>1</b>
<b>Flammability:</b>	<b>0</b>
<b>Reactivity:</b>	<b>0</b>
<b>Personal Protection:</b>	<b>B</b>

**IN CASE OF EMERGENCY CONTACT:** 704/553-0046

**PRODUCT NAME:** Morpaque  
**CHEMICAL FAMILY:** Mixture  
**PRODUCT CODE:** M00021

**MSDS NUMBER:** 62  
**DATE REVISED:** 7/28/2008  
**DATE PRINTED:** 7/28/2008  
**SUPERSEDES:** 10/9/2006

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

### 2. HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENT	CAS #	% BY WEIGHT	TLV	PEL
Di (2-Ethylhexyl) Phthalate (DEHP)	117-81-7	<5%	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>

The above ingredient is defined as hazardous by OSHA 29 CFR 1910.1200.

### 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** In 1980, the National Cancer Institute (NCI) reported a two year study which indicated that a specific strain of rat and mouse, when fed at extremely high doses of DEHP, exhibited a statistically significant increase in liver tumors. This single NCI study was sufficient to satisfy the legislative requirement to list DEHP as a suspected animal carcinogen. Prior bioassays at only slightly lower dietary levels have shown no tumor formation.

**EYE CONTACT:** May cause eye irritation

**SKIN CONTACT:** May cause skin irritation

### 3. HAZARDS IDENTIFICATION (CONTINUED)

**INGESTION:** Abdominal cramps, nausea, diarrhea

**INHALATION:** Heated vapors or mists may cause nausea and respiratory tract irritation. The low vapor pressure of this material essentially eliminates an inhalation hazard unless the product is heated or misted.

### 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:** If victim is conscious, give liquids. Get medical attention.

**MEDICAL CONDITIONS AGGRAVATED:** None known

### 5. FIRE FIGHTING MEASURES

**FLASH POINT (° F):** >200 (COC)

**OSHA FLAMMABILITY CLASSIFICATION:** None

**EXTINGUISHING MEDIA:** Water spray, Dry chemical, or protein type air foams.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self contained breathing apparatus.

**EXPLOSION LIMITS IN AIR - LOWER (%):** Not determined      **UPPER (%):** Not determined

**AUTO IGNITION TEMP (° F):** Not determined

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** May evolve a flammable gas (less than 8% based on the total weight of the product) at elevated temperatures. This could cause closed containers to expand.

### 6. ACCIDENTAL RELEASE MEASURES

**ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Dike to contain spill. Recover free product. Collect remaining product with absorbent materials..

### 7. HANDLING AND STORAGE

**HANDLING:** Avoid eye and skin contact. Wash thoroughly after handling.

## 7. HANDLING AND STORAGE (CONTINUED)

**STORAGE:** Do not store near heat or flame. Material can expand containers. Use caution in opening expanded containers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use with adequate ventilation.

**RESPIRATORY PROTECTION EQUIPMENT:** Not necessary at room temperature.

**PROTECTIVE GLOVES:** Recommended

**EYE AND FACE PROTECTION:** Safety glasses recommended.

**OTHER PROTECTIVE EQUIPMENT:** Usually not required.

**VENTILATION:** Local exhaust as needed near processing equipment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Boiling Range/Point:** Not applicable

**Vapor Pressure:** Unknown

**Vapor Density (AIR=1):** >1

**Physical State:** Thick liquid

**Color:** White or cream

**Odor:** Mild ammonia

**% Volatile by Weight:** 0.2%-4%

**VOC (g/l):** 2 - 50 g/l

**Evaporation Rate (Butyl Acetate=1):** Unknown

**Specific Gravity @ 25° C:** 0.90-0.95

**Weight per gallon:** 7.4-7.9

## 10. STABILITY AND REACTIVITY

**STABILITY:** This product is stable

**HAZARDOUS POLYMERIZATION:** Will not occur

**HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS:** CO, CO<sub>2</sub>

**INCOMPATIBILITY (MATERIALS TO AVOID):** None

**CONDITIONS TO AVOID:** Storage temperatures above 95° F.

## 11. TOXICOLOGICAL INFORMATION

**CARCINOGENICITY:** IARC Group 2B; NTP anticipated carcinogen [Di(2-ethylhexyl) phthalate]  
**ACUTE ORAL LD50:** 30.6 g/kg [Di(2-ethylhexyl) phthalate]  
**ACUTE DERMAL LD50:** 25.0 g/kg [Di(2-ethylhexyl) phthalate]

## 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** Di (2-ethylhexyl) phthalate (DEHP)  
48 Hour EC/LC50 Daphnia magna >0.16 mg/l mortality  
96 Hour flow-thru, EC/LC50 Rainbow trout >19.5 mg/l mortality  
96 Hour static, EC/LC50 O. mykiss >100 mg/l mortality

**CHEMICAL FATE INFORMATION:** DEHP released to water systems will biodegrade fairly rapidly (half-life 2-3 weeks) following a period of acclimation. It will also strongly absorb to sediments (log Koc 4-5). Phthalate esters are degraded by microbiota and metabolized by fish and animals. They are not expected to biomagnify.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of materials in accordance with the applicable Local, State, and Federal regulations.

## 14. TRANSPORT INFORMATION

Not regulated for shipment in single containers holding 2000 lbs or less.

**DOT SHIPPING NAME:** Not applicable  
**DOT HAZARD CLASS:** Not applicable  
**UN/NA NUMBER:** Not applicable  
**DOT PACKING GROUP:** Not applicable  
**AIR FREIGHT TRANSPORTATION:** Not applicable  
**OCEAN TRANSPORTATION:** Not applicable

## 15. REGULATORY INFORMATION

**TSCA STATUS:** All components of these products are on the US TSCA Inventory.

**CALIFORNIA PROPOSITION 65:** Di (2-ethylhexyl) phthalate

**SARA 302 EXTREMELY HAZARDOUS SUBSTANCES LIST:** None

**SARA (311,312) HAZARD CLASS:** Acute

**SARA SECTION 313 TOXIC CHEMICALS:** Di (2-ethylhexyl) phthalate 117-81-7 <5%

## 15. REGULATORY INFORMATION (CONTINUED)

<b>CERCLA RQ:</b>	100 lbs [Di (2-ethylhexyl) phthalate]
<b>AUSTRALIAN INVENTORY CHEMICAL SUBSTANCES:</b>	Unknown at this time
<b>CANADIAN INVENTORY:</b>	Di (2-ethylhexyl) phthalate
<b>EINECS REGULATIONS:</b>	Unknown at this time
<b>JAPAN:</b>	Unknown at this time
<b>KOREAN CHEMICAL INVENTORY:</b>	Unknown at this time

## 16. OTHER INFORMATION

### **DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES:**

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