

# MATERIAL SAFETY DATA SHEET

*Product Name:* ERL 4221  
*Catalog Number:* 21321  
*DOT Hazard Class:* Not Regulated  
*MSDS Prepared:* 9/2011

*Distributed By:* Ladd Research  
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## **CHEMICAL COMPONENTS**

|  | <i>CAS Number</i> | <i>Percent</i> | <i>Exposure Limits</i> |
|--|-------------------|----------------|------------------------|
| 7-Oxabicyclo [4.1.0] heptane-3-carboxylic acid, 7-oxabicyclo [4.1.0]hept-3-yl methyl ester | 2386-87-0         | >82%<br><89%   | Not available          |
| Soluble Oligomer   | not available     | >8%<br><13%    | Not available          |
| Monoepoxides of 3-cyclohexenyl-methyl-3-cyclohexene carboxylate                            | not available     | >3%<br><5%     | Not available          |

## **PHYSICAL AND CHEMICAL DATA**

**Physical State and Appearance** – Odorless, colorless, liquid

**Boiling Point:** >250°C at 1 atmosphere

**Vapor Density:** 9 (air=1)

**Specific Gravity:** 1.173 (water=1)

**Freezing Point:** Sets to glass at -37°C

**Solubility in Water:** >0.1%

**Molecular Weight:** 252 g/mol

## **FIRE AND EXPLOSION HAZARD DATA**

**Flash Point:** 118°C (Pensky-Martens Closed Cup)

**Flammable Limits:** Not available

**Autoignition Temperature:** Not determined

**Extinguishing Media:** Water fog or fine spray. Dry chemical. Carbon dioxide. Foam.

**Unusual Fire and Explosion Hazards:** Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

**Hazardous Combustion Products:** Phenolic compounds, CO<sub>2</sub>, CO

## **HEALTH HAZARD DATA**

**Eye:** Slight eye irritation

**Skin:** Slight skin irritation.

***EMERGENCY AND FIRST AID***

**Inhalation:** Remove to fresh air. Consult doctor if needed.  
**Eye:** Flush immediately with water for at least 1 to 2 minutes.  
**Skin:** Remove material with soap and water.

***REACTIVITY DATA***

**Stability:** Stable  
**Conditions to Avoid:** Elevated temperatures.  
**Incompatible Materials:** Oxidizing materials. Avoid contact with acids and bases.  
**Hazardous Polymerization:** Will not occur by itself.

***SPILL, DISPOSAL AND STORAGE INFORMATION***

**Spill:** Contain spilled material. Collect in suitable container. Wash spill site with water.  
**Disposal:** Do not dump into sewers, on the ground, or into any body of water. Dispose of in accordance with local, state and federal regulations.  
**Storage:** Store in cool, dry place.

***PROTECTIVE EQUIPMENT AND CONTROL MEASURES***

**Respiratory:** None needed  
**Ventilation:** Good general ventilation sufficient.  
**Eye:** Safety glasses

***SECTION 313 SUPPLIER NOTIFICATION***

**Not applicable.**

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