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## 1. PRODUCT AND COMPANY IDENTIFICATION

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### MICROPOSIT(TM) LOL(TM) 2000 Lift Off Layer

**Supplier**

Rohm and Haas Electronic Materials LLC  
455 Forest Street  
Marlborough, MA 01752 United States of America

Revision date: 01/01/2004

For non-emergency information contact: 508-481-7950

**Emergency telephone number**

Chemtrec 800-424-9300  
Rohm and Haas Emergency 215-592-3000

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

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Component	CAS-No.	Concentration
Dye Compound		0.1 - <= 1.0 %
Cyclopentanone	120-92-3	91.0 - <= 99.0 %
Aliphatic imide polymer		3.0 - <= 8.0 %

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## 3. HAZARDS IDENTIFICATION

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**Emergency Overview****Appearance**

Form liquid  
Colour Colorless to yellow  
Odour sweet

**Hazard Summary****WARNING!**

Flammable liquid and vapor. Causes irritation to eyes, nose, and respiratory tract.  
Prolonged, repeated contact, inhalation, ingestion, or absorption through the skin, may cause toxic effects to internal organ systems (liver, kidney, central nervous system).

**Potential Health Effects**

**Primary Routes of Entry:** Inhalation, ingestion, eye and skin contact, absorption.

**Eyes:** May cause pain, transient irritation and superficial corneal effects.

**Skin:** Material may cause irritation.

Prolonged or repeated exposure may have the following effects:

central nervous system depression

drowsiness

defatting of skin leading to irritation and dermatitis

**Ingestion:** Swallowing may have the following effects:

irritation of mouth, throat and digestive tract

Repeated doses may have the following effects:

central nervous system depression

drowsiness

**Inhalation:** Inhalation may have the following effects:

irritation of nose, throat and respiratory tract

Higher concentrations may have the following effects:

systemic effects similar to those resulting from ingestion

**Target Organs:** Eye

Respiratory System

Skin

nervous system

#### **Carcinogenicity**

Not considered carcinogenic by NTP, IARC, and OSHA

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## **4. FIRST AID MEASURES**

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**Inhalation:** Remove from exposure. If there is difficulty in breathing, give oxygen. Seek medical attention if symptoms persist.

**Skin contact:** Wash skin with water. Continue washing for at least 15 minutes. Obtain medical attention if blistering occurs or redness persists.

**Eye contact:** Immediately flush the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

**Ingestion:** Wash out mouth with water. Have victim drink 1-3 glasses of water to dilute stomach contents. Induce vomiting if person is conscious. Immediate medical attention is required. Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing.

#### **Notes to physician**

Treat symptomatically.

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## **5. FIRE-FIGHTING MEASURES**

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**Flash point** 30 °C (86 °F )

**Suitable extinguishing media:** Use water spray, foam, dry chemical or carbon dioxide. Keep containers and surroundings cool with water spray.

**Specific hazards during fire fighting:** This product may give rise to hazardous vapors in a fire. Vapors can travel a considerable distance to a source of ignition and result in flashback.

**Special protective equipment for fire-fighters:** Wear full protective clothing and self-contained breathing apparatus.

**Further information:** Pressure may build up in closed containers with possible liberation of combustible vapors.

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## 6. ACCIDENTAL RELEASE MEASURES

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### Personal precautions

Wear suitable protective clothing.  
Wear respiratory protection.  
Eliminate all ignition sources.

### Environmental precautions

Prevent the material from entering drains or water courses.  
Do not discharge directly to a water source.  
Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.

### Methods for cleaning up

Contain spills immediately with inert materials (e.g., sand, earth).  
Transfer into suitable containers for recovery or disposal.  
Finally flush area with plenty of water.

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## 7. HANDLING AND STORAGE

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### Handling

Use local exhaust ventilation. Avoid contact with eyes, skin and clothing. Keep container tightly closed.

**Further information on storage conditions:** Keep away from heat, sparks, flame, and other sources of ignition. Practice good personal hygiene to prevent accidental exposure.

### Storage

**Storage conditions:** Store in original container. Keep away from heat and sources of ignition. Storage area should be: cool dry well ventilated out of direct sunlight

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### Exposure limit(s)

Exposure limits are listed below, if they exist.

**Eye protection:** goggles

**Hand protection:** Butyl rubber gloves. Other chemical resistant gloves may be recommended by your safety professional.

**Skin and body protection:** Normal work wear.

**Respiratory protection:** Respiratory protection if there is a risk of exposure to high vapor concentrations. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

**Engineering measures:** Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (local exhaust), and control of process conditions.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Appearance

<b>Form</b>	liquid
<b>Colour</b>	Colorless to yellow
<b>Odour</b>	sweet
<b>pH</b>	neutral
<b>Boiling point/range</b>	130 °C (266 °F)
<b>Flash point</b>	30 °C (86 °F)
<b>Relative vapour density</b>	Heavier than air.
<b>Water solubility</b>	insoluble
<b>Relative density</b>	0.96
<b>Evaporation rate</b>	Slower than ether
<b>VOC's</b>	892.8 g/l

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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## 10. STABILITY AND REACTIVITY

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<b>Hazardous reactions</b>	Stable under normal conditions.
<b>Conditions to avoid</b>	High temperatures Static discharge
<b>Materials to avoid</b>	Combustibles Reducing agents Oxidizing agents bases acids
<b>Hazardous decomposition products</b>	Carbon monoxide, carbon dioxide,
<b>polymerization</b>	Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

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*Toxicological information on this product or its components appear in this section when such data is available.*

Component: **Cyclopentanone**  
**Acute oral toxicity** LD50 rat 1,180 mg/kg

Component: **Cyclopentanone**  
**Acute inhalation toxicity** LC50 rat 19,500 mg/m3

Component: **Cyclopentanone**  
**Acute dermal toxicity** LD50 rabbit >5,000 mg/kg

Component: **Cyclopentanone**  
**Skin irritation** A single application to rabbit skin produced mild irritation.

Component: **Cyclopentanone**  
**Eye irritation** Single application to the rabbit eye produced severe conjunctival irritation and corneal damage.

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## 12. ECOLOGICAL INFORMATION

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*Ecotoxicological information on this product or its components appear in this section when such data is available.*

### **Cyclopentanone**

**Ecotoxicity effects**  
**Toxicity to aquatic invertebrates** EC50 Daphnia magna 24 h  
 1,435 mg/l

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## 13. DISPOSAL CONSIDERATIONS

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**Environmental precautions:** Prevent the material from entering drains or water courses.  
 Do not discharge directly to a water source.  
 Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.

### **Disposal**

Dispose in accordance with all local, state (provincial), and federal regulations. Incineration is the recommended method of disposal for containers. Under RCRA, it is the responsibility of the product's user to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because the product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

Do not remove label until container is thoroughly cleaned. Empty containers may contain hazardous residues. This material and its container must be disposed of in a safe way.

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## 14. TRANSPORT INFORMATION

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### **DOT**

<b>Proper shipping name</b>	Cyclopentanone solution
<b>UN-No</b>	UN 2245
<b>Class</b>	3

Packing group III

## IMO/IMDG

Proper shipping name CYCLOPENTANONE SOLUTION  
 UN-No UN 2245  
 Class 3  
 Packing group III

## 15. REGULATORY INFORMATION

**SARA TITLE III: Section 311/312 Categorizations (40CFR370):** Immediate, delayed, flammability hazard

**SARA TITLE III: Section 313 Information (40CFR372)**

This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

**U.S. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D):**

U.S. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)  
 This product does not contain any substances subject to Section 12(b) export notification.

**US. Toxic Substances Control Act (TSCA)** All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**California (Proposition 65)**

This product does not contain materials which the State of California has found to cause cancer, birth defects or other reproductive harm.

## 16. OTHER INFORMATION

**Hazard Rating**

	Health	Fire	Reactivity
<b>NFPA</b>	2	3	0

**Legend**

ACGIH	American Conference of Governmental Industrial Hygienists
BAc	Butyl acetate
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit (STEL):
TLV	Threshold Limit Value
TWA	Time Weighted Average (TWA):
	Bar denotes a revision from prior MSDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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