ELECTRONIC MATERIALS
ROHM HAAS

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

MICROPOSIT(TM) Remover 1165

Revision date: 11/29/2004

Supplier

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

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

Emergency telephone number

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

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
1-methyl-2-pyrrolidinone	872-50-4	94.0 - 95.0 %
Pyrrolidinone Compound		5.0 - 6.0 %

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance

Form	liquid
Colour	Natural, slightly white
Odour	amines

Hazard Summary

CAUTION!
Combustible liquid and vapor. Causes irritation to eyes, nose, and respiratory tract.
Prolonged, repeated contact with skin may cause drying, defatting, or dermatitis.

Potential Health Effects

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

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

6. ACCIDENTAL RELEASE MEASURES

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.

7. HANDLING AND STORAGE

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit(s)

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value
1-methyl-2-pyrrolidinone	Rohm and Haas	TWA	10 ppm
	Rohm and Haas	STEL	25 ppm
	Rohm and Haas	Absorbed via skin	

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.

Acute oral toxicity LD50 guinea pig 1,400 mg/kg

Component: **1-methyl-2-pyrrolidinone**
Acute oral toxicity LD50 rat 3,914 mg/kg

Component: **1-methyl-2-pyrrolidinone**
Acute dermal toxicity LD50 guinea pig > 2,000 mg/kg

Component: **1-methyl-2-pyrrolidinone**
Acute dermal toxicity LD50 rabbit 8,000 mg/kg

Component: **1-methyl-2-pyrrolidinone**
Subchronic toxicity In a 2 year inhalation study, NMP did not cause any life-shortening or carcinogenic effects in rats at 0.04 or 0.4 mg/l (10 and 100 ppm respectively).

Component: **1-methyl-2-pyrrolidinone**
Toxicity to reproduction
Several inhalation studies in rats did not reveal any indication of maternal or embryo toxicity.
Component: **1-methyl-2-pyrrolidinone**
Mutagenicity
Not mutagenic when tested in bacterial or mammalian systems.

12. ECOLOGICAL INFORMATION

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

1-methyl-2-pyrrolidinone
Ecotoxicity effects

Toxicity to fish	LC50 Bluegill sunfish 96 h 832 ppm
Toxicity to algae	EC50 Algae 72 h >500 ppm
Toxicity to aquatic invertebrates	EC50 Daphnia magna 48 h 4897 ppm

13. DISPOSAL CONSIDERATIONS

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.

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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