

Material Safety Data Sheet



Section 1. Product and Company Identification

Product Name	RMS03-001C Licrivue™ Reactive Mesogen	Product Code	136655
Manufacturer	EMD Chemicals Inc. Pigments Division 7 Skyline Drive Hawthorne, NY 10532	Effective Date	10/30/2007
		Print Date	10/30/2007
For More Information Call	(914) 592-4660 M-F, 9AM-4:30 PM EST	In Case of Emergency Call	800-424-9300 CHEMTREC (USA) 613-996-6666 (Canada) 24 Hours/Day: 7 Days/Week
Synonym	Not applicable.		
Material Uses	Electronics Displays		
Chemical Family	Reactive Mesogen		

Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
RMS03-001C Licrivue™ Reactive Mesogen	Mixture (LC)*	100

*Chemical Identity withheld as a Trade Secret under the OSHA Hazard Communication Standard, 29CFR 1910.1200 (i) (1).

Section 3. Hazards Identification

Physical State and Appearance	Liquid. (Colorless to yellowish liquid with a solvent odor)
Emergency Overview	WARNING FLAMMABLE LIQUID AND VAPOR. MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion (not anticipated).
Potential Acute Health Effects	Eyes May cause eye irritation. Symptoms include: itching and redness after contact. Skin May cause skin irritation. Symptoms include: itching and redness after contact. Harmful if absorbed through the skin. Inhalation May cause coughing, wheezing, and general respiratory tract irritation. Ingestion Not an intended route of exposure. Effects unknown, treat as toxic if swallowed.
Potential Chronic Health Effects	Carcinogenic Effects This material is not known to cause cancer in animals or humans. Additional information See Toxicological Information (section 11)
Medical Conditions Aggravated by Overexposure:	Repeated or prolonged inhalation of vapors may aggravate respiratory medical conditions.

Continued on Next Page

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If symptoms persist, seek medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. If symptoms persist, seek medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do not ingest. If this material is swallowed, call a physician immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 5. Fire Fighting Measures

Flammability of the Product	Product will burn.
Auto-ignition Temperature	Not available.
Flash Points	Closed cup: 48°C (118.4°F).
Flammable Limits	Not available.
Products of Combustion	Development of hazardous combustion gases or vapors possible in the event of fire. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
Fire Hazards in Presence of Various Substances	Not available.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of static discharge No. Risks of explosion of the product in presence of mechanical impact No.
Fire Fighting Media and Instructions	In case of fire, use water spray (fog), foam, dry chemical, or CO2.
Protective Clothing (Fire)	Wear self-contained breathing apparatus and full protective clothing.
Special Remarks on Fire Hazards	Combustible when exposed to heat or flame.
Special Remarks on Explosion Hazards	Forms explosive mixtures with air at elevated temperatures.

Section 6. Accidental Release Measures

Small Spill and Leak	Absorb with an inert material and transfer the spilled material and absorbent to an appropriate waste disposal container.
Large Spill and Leak	Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with dry earth, sand or other non-combustible material. Do not allow water to enter container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas. Dike if necessary. Call for assistance on disposal.
Spill Kit Information	No specific spill kit required for this product.

Section 7. Handling and Storage

Handling	Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapors, spray or mists. Wash thoroughly after handling.
Storage	At +15 °C to +25°C. Keep container tightly closed in a cool, well-ventilated place. Keep away from sources of ignition. Keep away from heat, sparks and flame.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.
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Personal Protection

Eyes Splash goggles.

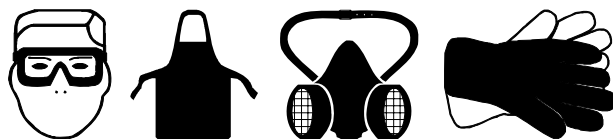
Body Synthetic apron.

Respiratory Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Hands Impervious gloves.

Feet Not applicable.

**Protective Clothing
(Pictograms)**



Personal Protection in Case of a Large Spill	Splash goggles. Synthetic apron. Nitrile gloves. Wear MSHA/NIOSH-approved self-contained breathing apparatus or equivalent and full protective gear.
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Product Name	Exposure Limits
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RMS03-001C Licrivue™ Reactive Mesogen	Not available.
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Section 9. Physical and Chemical Properties

Odor	Solvent
Color	Colorless. Colorless to yellow
Physical State and Appearance	Liquid. (Colorless to yellowish liquid with a solvent odor)
Molecular Weight	Not available.
Molecular Formula	Not available.
pH	Not applicable.
Boiling/Condensation Point	Not available.
Melting/Freezing Point	Not available.
Specific Gravity	Not available.
Vapor Pressure	Not available.
Vapor Density	Not available.
Odor Threshold	Not available.
Evaporation Rate	Not available.

LogK_{ow} Not available.

Solubility Not available.

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Conditions of Instability Fire or excessive heat.

Incompatibility with Various Substances Incompatible with acids, bases, alkalis, and oxidizing agents.

Hazardous Decomposition Products Combustible. Vapors are heavier than air. Development of hazardous combustion gases or vapors possible in the event of fire. Forms explosive mixtures with air at elevated temperatures.

Hazardous Polymerization Will not occur.

Section 11. Toxicological Information

RTECS Number: RMS03-001C Licrivue™ Reactive Mesogen Not available.

Toxicity Acute oral toxicity (LD₅₀): 8532 mg/kg [Rat].
Acute dermal toxicity (LD₅₀): 7500 mg/kg [Rabbit].

Chronic Effects on Humans CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
Repeated or prolonged inhalation of vapors may lead to chronic respiratory irritation.

Acute Effects on Humans May cause skin, eye and respiratory irritation.

Synergetic Products (Toxicologically) Not available.

Irritancy Draize Test: Not available.

Sensitization Not available.

Carcinogenic Effects This material is not known to cause cancer in animals or humans.

Toxicity to Reproductive System Not available.

Teratogenic Effects Not available.

Mutagenic Effects Not available.

Section 12. Ecological Information

Ecotoxicity Not available.

BOD5 and COD Not available.

Section 13. Disposal Considerations

EPA Waste Number Type: Hazardous chemical waste.
Location: United States
Classification: D001 (classification description EPA)

Treatment Dispose of according to all federal, state and local regulations.

Section 14. Transport Information

DOT Classification

Proper shipping name: FLAMMABLE LIQUID, N.O.S.
((2-METHOXY-1-METHYL-ETHYL) -ACETATE)



Hazard class: 3
UN number: 1993
Packing Group: III
ERG (Emergency Response Guide) No.: 128

Additional information: Remarks
No additional remark.

TDG Classification

Proper shipping name: FLAMMABLE LIQUID, N.O.S.
((2-METHOXY-1-METHYL-ETHYL) -ACETATE)



Hazard class: 3
UN number: 1993
Packing Group: III
Additional information: Remarks
No additional remark.

**IMO/MDG
Classification**

Proper shipping name: FLAMMABLE LIQUID, N.O.S.
((2-METHOXY-1-METHYL-ETHYL) -ACETATE)

Hazard class: 3
UN number: 1993
Packing Group: III
Additional information: Remarks
No additional remark.

**ICAO/IATA
Classification**

Proper shipping name: FLAMMABLE LIQUID, N.O.S.
((2-METHOXY-1-METHYL-ETHYL)-ACETATE)

Hazard class: 3
UN number: 1993
Packing Group: III
Additional information: Remarks
No additional remark.

Section 15. Regulatory Information

U.S. Federal Regulations

TSCA: FOR RESEARCH AND DEVELOPMENT USE ONLY. Use under the supervision of qualified personnel.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.
SARA 313 Form R Reporting Requirements- No products were found.
SARA 313 Supplier Notification- No products were found.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

WHMIS (Canada)

Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).

This product or its components are not listed on the DSL/NDSL.

International Regulations

EINECS Not available.

DSCL (EEC) R10- Flammable.
R43- May cause sensitization by skin contact.R36- Irritating to eyes.R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

International Lists No products were found.

State Regulations

No products were found.
California Prop. 65: No products were found.

Section 16. Other Information

**Hazardous Material
Information System
(U.S.A.)**

Health	1
Fire Hazard	2
Reactivity	0
Personal Protection	H

**National Fire
Protection
Association
(U.S.A.)**



**Other Special
Considerations**

No additional information.

**Changed Since Last
Revision**



Notice to Reader

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