

ROCKLAND COLLOID LLC  
LIQUID LIGHT PHOTOGRAPHIC EMULSION  
MATERIAL SAFETY DATA SHEET  
Trade Name: LIQUID LIGHT® EMULSION  
Item Name: PHOTOGRAPHIC EMULSION

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General Information  
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Company's Name: ROCKLAND COLLOID LLC  
Company's P. O. Box: 3120  
Company's City: OREGON CITY  
Company's State: OR  
Company's Country: US  
Company's Zip Code: 97045  
Company's Emergency Phone #:503-655-4152  
Company's Info Phone # 503-655-4152  
Date MSDS Prepared: 01JAN96  
Safety Data Review Date: 6/06/14  
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Ingredients/Identity Information  
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Proprietary: NO  
Ingredient: SILVER HALIDES CONSISTING OF INGREDIENTS 2, 3 & 4.  
Ingredient Sequence Number: 01  
Percent: 20  
NIOSH (RTECS) Number: 1006800SH  
CAS Number: 7783-96-2  
OSHA PEL: N/A  
ACGIH TLV: N/A  
Proprietary: NO  
Ingredient: SILVER BROMIDE  
Ingredient Sequence Number: 02  
Percent: 5  
NIOSH (RTECS) Number: 1006301SB  
CAS Number: 7785-23-1  
OSHA PEL: N/A  
ACGIN TLV: N/A  
Proprietary: NO  
Ingredient: SILVER CHLORIDE  
Ingredient Sequence Number: 03  
Percent: 5  
NIOSH (RTECS) Number: VW3563000  
CAS Number: 7783-90-6  
OSHA PEL: N/A  
ACGIH TLV: N/A  
Proprietary: NO  
Ingredient: GELATIN  
Ingredient Sequence Number 04  
Percent: 10  
CAS Number: 9000-70-8  
OSHA PEL: N/A  
ACGIN TLV: N/A  
Proprietary: NO  
Ingredient: CADMIUM CHLORIDE (SARA III)  
Ingredient Sequence Number: 05  
Percent: TRACE  
NIOSH (RTECS) Number: EV0178000  
CAS Number: 7790-78-5  
OSHA PEL: 0.2MG/CUM CADMIUM

ACGIH TLV: 0.01 MG/CUM  
Proprietary: NO  
Ingredient: WATER  
Percent: <95  
NIOSH (RTECS) Number: ZC0110000  
CAS Number: 7732-18-5

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Physical/Chemical Characteristics  
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Appearance and Odor: WHITE GEL. NO ODOR.  
Boiling Point: 100C  
Melting Point: 80C  
Vapor Pressure (MM Hg/70 F): 23.5mm  
Vapor Density: <1  
Specific Gravity: >1  
Evaporation Rate and Ref: (BUAC=1) <1  
Solubility in Water: SOLUBLE IN WARM WATER.

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Fire and Explosion Hazard Data  
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Flash Point: N/A  
Extinguishing Media: WATER MIST, ALCOHOL FOAM, CO\*2, DRY CHEMICAL.

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Reactivity Data  
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Stability: YES  
Condition to Avoid (Stability): EXPOSURE TO HEAT, LIGHT & OTHER RADIATION SOURCES EXCEPT AS NECESSARY IN PROCESSING.  
Hazardous Decomposition Products: NONE.  
Hazardous Poly Occur: NO

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Health Hazard Data  
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Inhalation: IF SPRAYED, PROTECT AGAINST AEROSOL VAPORS.  
Skin: MILD IRRITANT.  
Ingestion: SLIGHTLY TOXIC.  
Health Hazards Acute and Chronic: THIS PRODUCT CONTAINS TRACE AMOUNTS OF CADMIUM SALT THAT MAY CAUSE LOCALIZED IRRITATION.  
Emergency/First Aid Procedures: INHALATION: REMOVE SUBJECT TO FRESH AIR, GIVE OXYGEN OR ARTIFICIAL RESPIRATION IF NEEDED. EYE CONTACT: FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTS. IF EYE IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. SKIN CONTACT: REMOVE CONTAMINATED CLOTHING AND WASH CONTACT AREA WITH WATER (WARM WATER IF AVAILABLE). IF SKIN IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. INGESTION:IF APPRECIABLE QUANTITIES ARE SWALLOWED, CALL A PHYSICIAN OR POISON CONTROL CENTER.

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Precautions for Safe Handling and Use  
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Steps If Material Released/Spill: MOP UP WITH WARM OR HOT WATER. SAVE FOR DISPOSAL. FLUSH AREA WITH WARM WATER.  
Waste Disposal Method: DISOSAL SHOULD BE MADE IN CONFORMANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.  
Precautions-Handling/Storing: STORE IN COOL, DRY PLACE AWAY FROM HEAT, RADIATION OR LIGHT SOURCES.

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Control Measures  
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Respiratory Protection: NOT APPLICABLE UNLESS APPLYING BY SPRAY, WHERE CHEMICAL MIST PROTECTION IS REQUIRED.

Ventilation: ROOM VENTILATION UNLESS APPLYING BY SPRAY, WHERE FUME HOOD OR OTHER MEANS OF LOCALIZED AIR-EXTRACTION IS REQUIRED.  
Protective Gloves: DISPOSABLE RUBBER OR PLASTIC GLOVES RECOMMENDED.  
Protective Clothing: WEAR CLOTHING TO LIMIT SKIN CONTACT. A SAFETY SHOWER AND EYE WASH FACILITY SHOULD BE AVAILABLE.  
Eye Protection: GOGGLES.  
Work Hygienic Practices: WASH HANDS AFTER HANDLING.  
Suppl. Safety & Health Data: ESSENTIALLY INSOLUBLE IN WATER AT ROOM TEMP BECAUSE OF GELATIN CONTENT, EXCEPT FOR TRACE COMPONENTS. SOLUBLE IN WATER WARM ENOUGH TO MELT GELATIN (ABOVE 80C OR 100F).

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Transportation Data  
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Trans Data Review Date: 14JUN96  
DOT Hazard Class: NOT REGULATED  
DOT Shipping Name: N/A  
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Label Data  
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Label Required: YES  
Technical Review Date: 6/06/14  
Label Status: G  
Common Name: PHOTOGRAPHIC EMULSION  
Chronic Hazard: NO  
Signal Word: CAUTION!  
Acute Health Hazard-Slight: X  
Contact Hazard-Slight: X  
Fire Hazard-None: X  
Reactivity Hazard-None: X  
Special Hazard Precautions: AVOID HEAT, LIGHT AND OTHER RADIATION SOURCES.  
MAY CAUSE EYE/SKIN IRRITATION-AVOID CONTACT WITH EYES/SKIN/CLOTHING.  
Label Name: LIQUID LIGHT  
Label Emergency Number: 1-800-222-1222