

ROCKLAND COLLOID LLC
AG-PLUS PHOTOGRAPHIC EMULSION
MATERIAL SAFETY DATA SHEET
Trade Name: AG-PLUS® PHOTOGRAPHIC 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 Ph#:914-413-3000
Date MSDS Prepared: 01JAN96
Safety Data Review Date: 9/09/12

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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: 40
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: 10
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: 10
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 reference : (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: CHEMICAL WORKERS 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: 9/09/12
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: 9/09/12
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: AG-PLUS