

MATERIAL SAFETY DATA SHEET



Date Issued: 03/17/2006
MSDS No: Aquafilm batch1
Date-Revised: 03/24/2006
Revision No: 3

Aquafilm L711, L712, L330, L336, L337

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Aquafilm L711, L712, L330, L336, L337

MANUFACTURER

MonoSol AF Ltd.
 Unit 313 Oak Drive
 Hartlebury Trading Estate
 Hartlebury, Worcestershire
 DY10 4JB, UK

Service Number: +44 [0] 1299.251.335

24 HR. EMERGENCY TELEPHONE NUMBERS

Chemtrec: +1.703.527.3887
 U.S. : 1.800.424.9300

2. HAZARDS IDENTIFICATION

HAZARD DESIGNATION

EEC LABEL SYMBOL AND CLASSIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Clear, translucent film.

POTENTIAL HEALTH EFFECTS

EYES: Mechanical irritation only.

SKIN: Not a probable route of entry.

SKIN ABSORPTION: Not a route of entry.

INGESTION: Not a probable route of entry. No chronic effects are anticipated.

INHALATION: Not a probable exposure route.

WARNING CAUTION LABELS: No special warning or caution labels are required.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Wt.%</u>	<u>CAS</u>	<u>EINECS</u>
Polyvinyl Alcohol Resin	25213-24-5		

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water. If irritation develops, seek medical attention.

SKIN: Remove from skin with soap and warm water.

INGESTION: Not a probable route of entry. In case of problems, seek medical advice.

INHALATION: Not a probable route of entry.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: As in any fire, wear self-contained breathing apparatus in pressure demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

EXTINGUISHING MEDIA: Water spray, dry chemical powder, carbon dioxide, or foam as appropriate for surrounding fire and materials.

FIRE FIGHTING EQUIPMENT: Respiratory and eye protection are required for fire fighting personnel. Full protective equipment (Bunker Gear) and self contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of a SCBA may not be required.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Sweep dry spills promptly. Avoid wetting spills as they become very slippery.

LARGE SPILL: Sweep dry spills promptly. Avoid wetting spills as they become very slippery.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Use appropriate containment to avoid runoff or release to sewer or waterways.

GENERAL PROCEDURES: Shovel and dispose of at an appropriate waste disposal facility according to current applicable laws and regulations, and product characteristics at time of disposal.

7. HANDLING AND STORAGE

HANDLING: Handle and use in a manner consistent with good industrial/manufacturing techniques and practices.

STORAGE: Store in unopened containers under cool and dry conditions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses if appropriate to the film conversion method.

SKIN: Not required under normal conditions. However, gloves may be worn to avoid dry skin.

WORK HYGIENIC PRACTICES: Good personal hygiene practices should always be followed.

COMMENTS: No PEL's, TLV's or OEL's for this product or it's ingredients are listed in the current issue of ACGIH's Guide to Occupational Exposure Values nor have they been determined by the manufacturer.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid

ODOR: May have a slight acetic acid odor.

APPEARANCE: Clear, translucent film.

pH: 4.5-7.5 (4% solution, 20° C)

BOILING POINT: Not Applicable

FREEZING POINT: Not Applicable

MELTING POINT: 160°C to 220°C

THERMAL DECOMPOSITION: to 300°C

SOLUBILITY IN WATER: Fully soluble in cold water

EVAPORATION RATE: Not Applicable

DENSITY: 1.25 g/cm³ at 20 °C

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: The product is stable under normal ambient conditions of temperature and pressure.

POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Temperatures above 240 degrees Celsius.

HAZARDOUS DECOMPOSITION PRODUCTS: Irritating and toxic fumes at elevated temperatures from burning, heating or reaction with other materials.

INCOMPATIBLE MATERIALS: Oxidizing agents (i.e. perchlorates, nitrates etc.)

11. TOXICOLOGICAL INFORMATION

ACUTE

ORAL LD₅₀: > 2000 mg/kg (rat)

Notes: Method - OECD401

EYE EFFECTS: The supplier of the main component of this film has tested that raw material under FDA guidelines and has found it to be non-irritating to both skin and eyes.

SKIN EFFECTS: The supplier of the main component of this film has tested the main raw material under FDA guidelines and has found it to be non-irritating to both skin and eyes.

CARCINOGENICITY

IARC: Listed by IARC - No

NTP: Listed by NTP - No

OSHA: Listed by OSHA - No

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: No adverse environmental impact expected.

ECOTOXICOLOGICAL INFORMATION: Not expected to bioaccumulate.

DISTRIBUTION: Effluent water testing showed no adverse results to single-celled Daphnia.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of waste at an appropriate waste disposal facility according to current applicable laws and regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Polyvinyl Alcohol Film

PRIMARY HAZARD CLASS/DIVISION: Not Regulated

OTHER SHIPPING INFORMATION: Harmonization Number: bags - 39 23 2990; rolls - 39 20 9959

AIR (ICAO/IATA)

SHIPPING NAME: Polyvinyl Alcohol Film

PRIMARY HAZARD CLASS/DIVISION: Not Regulated

VESSEL (IMO/IMDG)

SHIPPING NAME: Polyvinyl Alcohol Film

PRIMARY HAZARD CLASS/DIVISION: Not Regulated

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME: Polyvinyl Alcohol Film

PRIMARY HAZARD CLASS/DIVISION: Not Regulated

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** No
CHRONIC: No

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All intentional ingredients are listed on the TSCA Inventory.

TSCA STATUS: In compliance with TSCA Inventory requirements for commercial purposes.

REGULATIONS

STATE REGULATIONS This product contains components which may have a trace amount of a California Proposition 65 listed material.

16. OTHER INFORMATION

REASON FOR ISSUE: revision

APPROVED BY: Andrew P. Verrall **TITLE:** Director - Research & Development

PREPARED BY: Melanie C. Kroccek

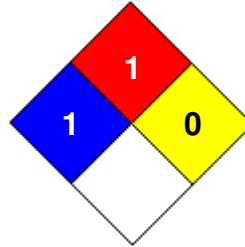
REVISION SUMMARY: Revision #: 3 This MSDS replaces the April 27, 2005 MSDS. Any changes in

information are as follows: In Section 1 Approved by Title Information Contact Prepared By Date Prepared
 24 Hour Emergency Phone Numbers In Section 2 Carcinogenicity In Section 4 Notes to Physician In
 Section 9 (Group Field) for pH (Group Field) for Density Density Grams Density Grams °C In Section 13
 Product Disposal

HMIS RATING

HEALTH:	1
FLAMMABILITY:	1
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	A

NFPA CODES



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