

## SAFETY DATA SHEET

#### 1. Identification

Product identifier	L711
Other means of identification	
Synonyms	L712
Recommended use	Polyvinyl alcohol-based film used as a water-soluble unit-dose delivery system
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/	Distributor information
Manufacturer	
Manufacture	
Company name	MonoSol AF
Address	Oak Drive, Hartlebury Trading Estates Hartlebury, Worcestershire DY104JB
Telephone (General	+1 219-762-3164
Assistance)	
Emergency Telephone	+1 703-527-3887
(CHEMTRAC)	
E-mail Website	reach@monosol.com www.MonoSol.com
Websile	www.ivionocol.com
2. Hazard(s) identification	
Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	Not applicable.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

#### 3. Composition/information on ingredients

#### Mixtures

\*Product is a non-hazardous mixture of which the composition is a trade secret

#### 4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed General information Treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 5. Fire-fighting measures Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Unsuitable extinguishing Do not use water jet as an extinguisher, as this will spread the fire. media Specific hazards arising from During fire, gases hazardous to health may be formed. the chemical Special protective equipment Self-contained breathing apparatus and full protective clothing must be worn in case of fire. and precautions for firefighters Move containers from fire area if you can do so without risk. **Fire fighting** equipment/instructions Specific methods Use standard firefighting procedures and consider the hazards of other involved materials. No unusual fire or explosion hazards noted. General fire hazards

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. In case of spills, beware of slippery floors and surfaces. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

#### 7. Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Observe good industrial hygiene practices.	
Conditions for safe storage,	Store in original tightly closed container. Store away from incompatible materials (see Section 10	
including any incompatibilities	of the SDS).	

#### 8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear suitable protective clothing.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

#### 9. Physical and chemical properties

#### Appearance

Physical state	Solid.
Form	Film.
Color	Colorless to light yellow. Translucent.
Odor	May have a slight acetic acid odor
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

### 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

#### 11. Toxicological information

#### Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.			
Skin contact	No adverse effects due to skin contact are expected.		
Eye contact	Direct contact with eyes may cause temporary irritation.		
Ingestion	Expected to be a low ingestion hazard.		
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.		
Information on toxicological effects			
Acute toxicity	Not available.		
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.		

Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitizatior	1	
<b>Respiratory sensitization</b>	Not available.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
OSHA Specifically Regulate	d Substances (29 CFR 1910.1001-1050)	
Not listed.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not available.	
Chronic effects	Prolonged inhalation may be harmful.	
12. Ecological information		
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.	
Persistence and degradability	No data is available on the degradability of this product.	

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Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

#### 13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

#### 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### ΙΑΤΑ

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

# Transport in bulk according toNot established.Annex II of MARPOL 73/78 andthe IBC Code

#### 15. Regulatory information

#### **US** federal regulations

All components are on the U.S. EPA TSCA Inventory List.

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substa	nce List (40 CFR 302.4)	
Not listed.		
SARA 304 Emergency release notification		
Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not listed.		
Superfund Amendments and Re	authorization Act of 1986 (SARA)	
Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
SARA 302 Extremely hazaro Not listed.	dous substance	
SARA 311/312 Hazardous chemical	No	
SARA 313 (TRI reporting) Not regulated.		
Other federal regulations		
Clean Air Act (CAA) Sectior	112 Hazardous Air Pollutants (HAPs) List	
	112(r) Accidental Release Prevention (40 CFR 68.130)	
Not regulated.		
Safe Drinking Water Act (SDWA)	Not regulated.	
US state regulations		
	ubstances. CA Department of Justice (California Health and Safety	Code Section 11100)
Not listed. US. Massachusetts RTK - Substance List		
Not regulated. US. New Jersey Worker and Community Right-to-Know Act		
-	nd Community Right-to-Know Law	
Not listed. US. Rhode Island RTK Not regulated.		
US. California Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.		l is not known to contain
International Inventories		
<b>Country(s) or region</b> Australia	Inventory name Australian Inventory of Chemical Substances (AICS)	<b>On inventory (yes/no)</b> * Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

#### 16. Other information, including date of preparation or last revision

Issue date	08-28-2014
Revision date	04-30-2015
Version #	02
Disclaimer	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.
<b>Revision Information</b>	Product and Company Identification: Synonyms