

Safety Data Sheet (1907/2006/EC)**Material: 60066175****LIQUIDSEAL LSFAPH**

Version: 1.1 (GB)

Date of print: 25.04.2016

Date of last alteration: 15.01.2014

1 Identification of the substance/preparation and company**1.1 Name of substance/preparation****Commercial product name:** LIQUIDSEAL® for avocado post harvest**1.2 Use of substance/preparation:**Agricultural
Coating for: avocado
All other areas of application to be agreed with the
Application Engineering/ Technical Marketing Department
of the manufacturer.**1.3 Company name****Manufacturer/distributor:** Liquidseal Fruits
Street/POB-No.: Schuttersveld 9
State/postal code/city: 2316 XG Leiden
Telephone: +31 (0) 713014314
Telefax: +31 (0) 713014315

	E-mail	Telephone
Information about the Safety Data Sheet:	info@liquidseal.nl	+31 (0) 713014314

1.4. Emergency Information (the Netherlands)

Telephone +31 (0) 713014314

Emergency Information (International)

Telephone +31 (0) 713014314

2 Hazards identification**2.1 Classification:**

R-Phrase	Description
R-	-

This product is not a dangerous preparation within the meaning of Directive 1999/45/EC.**3 Composition/information on ingredients****3.1 Chemical characterization (substance):**

Chemical characteristics
Copolymer of: ethylene + vinyl esters (dispersion in water)

4 First-aid measures**4.1 General information:**

Under ordinary workplace conditions: No special measures required.

4.2 After inhalation:

No special measures required.

4.3 After contact with the skin:

Wash with plenty of water or water and soap. Seek medical advice in case of continuous irritation.

4.4 After contact with the eyes:

Rinse immediately with plenty of water. Seek medical advice in case of continuous irritation.

4.5 After swallowing:

In cases of sickness seek medical advice (show label if possible).

4.6 Advice for the physician:

Due to its physical properties, although in the dilutions used this is highly unlikely, the product if ingested in large quantities (half a liter or over) may cause mechanical irritation as it may agglutinate in the gastro-intestinal tract. Medical assistance should be sought. Depending on the symptoms, invasive measures may be necessary.

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5 Fire-fighting measures**5.0 General information:**

Product does not burn. Use extinguishing measures appropriate to the source of the fire. Dried up material is combustible.

5.1 Suitable extinguishing media:

not applicable.

5.2 Extinguishing media which must not be used for safety reasons:

not applicable.

5.3 Special exposure hazards arising from the substance of preparation itself, combustion products, resulting gases:

At low oxygen level: acetic acid.

5.4 Special protective equipment for fire fighting of dried up material:

Use respiratory protection independent of recirculated air.

6 Accidental release measures**6.1 Personal precautions:**

Wear personal protection equipment (see section 8). If material is released indicate risk of slipping.

6.2 Environmental precautions:

Prevent material from entering sewers or surface waters. Contain any fluid that runs out using suitable material (e.g. earth).

6.3 Methods for cleaning up:

Take up mechanically and dispose of according to local/state/federal regulations. For small amounts: Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean up with plenty of water. Dispose of cleansing water in accordance with local/state/federal regulations.

7 Handling and storage**7.0 General information:**

No special protective measures required.

7.1 Handling**Precautions for safe handling:**

Spilled substance increases risk of slipping.

Precautions against fire and explosion:

No special precautions against fire and explosion required.

7.2 Storage**Conditions for storage rooms and vessels:**

Protect against frost.

Advice for storage of incompatible materials:

not applicable.

Further information for storage:

not applicable.

Minimum temperature allowed during storage and transportation: 0 °C

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8. Exposure controls and personal protection equipment

8.1 Exposure limits

Maximum airborne concentrations at the workplace:

Not applicable

8.2 Exposure limited and controlled

8.2.1 Exposure in the work place limited and controlled

General protection and hygiene measures:

Even with dilutions used do not eat, drink when handling.

Personal protection equipment

If used in combination with manufactures instructions for spraying equipment and applicators:

Respiratory protection:

not required.

Hand protection:

Not required.

Eye protection:

Not required.

Skin protection:

not required.

8.2.2 Exposure to the environment limited and controlled:

Prevent material from entering surface waters and soil

8.3 Further information for system design and engineering measures

No special measures required.

9 Physical and chemical properties

9.1 General information

Physical state / form : Liquid

Colour : White

Odour : Slight

9.2 Important information about the protection of health, safety and the environment

Method

Melting point / melting range : approx. 0,00 °C

Boiling point / boiling range : approx. 100 °C at 1013 hPa

Flash point : not applicable

Ignition temperature : not applicable

Lower explosion limit (LEL) : not applicable

Vapour pressure : 23 hPa at 20 °C

Density : approx. 1,05 g/cm³

(DIN EN ISO
2811-1)

Water solubility / miscibility : Moderately soluble

pH-Value : 6 – 6,5

(DIN/ISO 976)

10 Stability and reactivity

10.0 General information:

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

10.1 Conditions to avoid:

none known.

10.2 Materials to avoid:

none known.

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10.3 Hazardous decomposition products:

If stored and handled in accordance with standard industrial practices and local regulations where applicable: none known. At increased temperature: acetic acid.

11 Toxicological information

11.0 General information:

According to our present state of knowledge no damaging effect expected when treated in accordance with standard industrial practices and local regulations where applicable. The toxicological results listed below are based on tests with similar materials.

11.1 Toxicological tests

Primary irritation:

Exposition effect species/test system source

To skin mildly irritating rabbit test report

11.2 Experience with man:

During manufacture and use: No information on damage to health

11.3 Further toxicological information:

-

12 Ecological information

12.1 Ecotoxicity

Species	Test method	Exp. Time	Result	Source
Carp (Cyprinus carpio)	Acute	96 h	> 1000 mg/l (LC50)	test report

No expected damaging effects to aquatic organisms.

Effects in sewage treatment plants (bacteria toxicity: respiration-/reproduction inhibition):

Test system	Exp. Time	Result	Source
Sludge	0,5 h	>1000 mg/l (EC10)	test report

According to current knowledge adverse effects on water purification plant are not expected.

12.2 Mobility

-

12.3 Persistence and degradability

Further information:

No data known.

12.4 Bio-accumulation potential

No harmful effects expected.

12.5 Other harmful effects

-

12.6 Additional information

General information:

Even though unlikely to have effects in light of concentrations used, prevent material from entering surface waters and Soil. In light of dilutions used, safe to release to water purification plants in its diluted state. No environmental problems Expected if handled and treated in accordance with standard industrial practices and local regulations where applicable Especially when taking into account low concentrations used. The ecotoxicological results provided were obtained from Tests with similar products albeit at much higher concentrations.

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13 Disposal considerations

13.1 Material

Recommendation:

Dispose of according to regulations by incineration in a special waste incinerator. Small quantities may be disposed of by incineration in an approved facility. Observe local/state/federal regulations. After chemical deflocculation: Can be disposed of with domestic waste. Observe local/state/federal regulations.

13.2 Uncleaned packaging

Recommendation:

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations.

Recommended cleaning agent:

Water

14 Transport information

14.1 Land transport ADR and RID

Road ADR:

Valuation : Not regulated for transport

Railway RID:

Valuation : Not regulated for transport

14.2 Transport by sea IMDG-Code

Valuation : Not regulated for transport

14.3 Air transport ICAO-TI/IATA-DGR

Valuation : Not regulated for transport

14.4 Transport/further information

Postal and courier service:

German postal dispatch : Permitted

Information dept. ref. to heading 14. Transport information:

Department MW-G (Gefahrgut-Service), Telefax: +49/(0) 8677/83-5589, Telephone: +49/(0) 8677/83-4950

15 Regulatory information

15.1 Warning label (EU)

R-Phrase	Description
R-	-
S-Phrase	Description
S-	-

15.2 National regulations:

National and local regulations must be observed.

15.3 Other international regulations

Details of international registration status

Listed on or in accordance with the following inventories:

EINECS – Europe

ECL – Korea

AICS – Australia

TSCA – USA

PICCS – Philippines

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16 Other information**16.1 Material**

The above information describes exclusively the safety requirements of the product(s) and is based on our present-day knowledge. It does not represent a guarantee for the properties of the product(s) described in terms of the legal warranty regulations. Properties of the product are to be found in the respective product leaflet.

16.2 Further information:

Commas appearing in numerical data denote a decimal point. Vertical lines in the left-hand margin indicate changes compared with the previous version. This version supersedes all previous versions.

End of Safety Data Sheet