



SAFETY DATA SHEET

Liquasil Metalseal SF

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Liquasil Metalseal SF

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Flexible coating

1.3. Details of the supplier of the safety data sheet

Supplier Liquasil Ltd
 Unit 3 Radway Industrial Estate
 Radway Road
 Solihull
 West Midlands
 B90 4NR
 0121 709 5352
 info@liquasil.com

1.4. Emergency telephone number

Emergency telephone 0121 709 5352 (office hours only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified
Health hazards Eye Irrit. 2 - H319 Skin Sens. 1 - H317
Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Warning

Hazard statements H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.

Precautionary statements P302+P352 IF ON SKIN: Wash with plenty of water.
 P501 Dispose of contents/ container in accordance with national regulations.
 P280 Wear protective gloves.
 P280 Wear eye protection.

Contains METHYL-0,0',0"-BUTAN-2-ONE-TRIOXIMOSILANE, BUTANONE OXIME VINYLSILANE, 3-(2-AMINOETHYLAMINO)-PROPYLTRIMETHOXYSILANE

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Supplementary precautionary statements P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| | |
|--|-------------|
| METHYL-0,0',0"-BUTAN-2-ONE-TRIOXIMOSILANE | 1-5% |
|--|-------------|

| | |
|------------------------|----------------------|
| CAS number: 22984-54-9 | EC number: 245-366-4 |
|------------------------|----------------------|

Classification

Eye Irrit. 2 - H319
Skin Sens. 1 - H317
STOT RE 2 - H373

| | |
|-----------------------------------|-------------|
| BUTANONE OXIME VINYLSILANE | 1-5% |
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|-----------------------|----------------------|
| CAS number: 2224-33-1 | EC number: 218-747-8 |
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Classification

Eye Dam. 1 - H318
Skin Sens. 1 - H317
STOT RE 2 - H373

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|---|---------------|
| 3-(2-AMINOETHYLAMINO)-PROPYLTRIMETHOXYSILANE | <1% |
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|-----------------------|----------------------|
| CAS number: 1760-24-3 | EC number: 217-164-6 |
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Classification

Acute Tox. 4 - H332
Eye Dam. 1 - H318
Skin Sens. 1 - H317

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|------------------------------|---------------|
| DIOCTYL TIN DILAURATE | <1% |
|------------------------------|---------------|

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| CAS number: 3648-18-8 | EC number: 222-883-3 |
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Classification

Repr. 2 - H361
STOT RE 2 - H373

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information In all cases of doubt, or if symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

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| Ingestion | Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. Do not induce vomiting. Get medical attention if any discomfort continues. |
| Skin contact | Wipe off excess material with cloth or paper. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues. |
| Eye contact | Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues. |

4.2. Most important symptoms and effects, both acute and delayed

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|---------------------|--------------------------------------|
| Inhalation | No specific symptoms known. |
| Ingestion | May cause discomfort if swallowed. |
| Skin contact | Mild dermatitis, allergic skin rash. |
| Eye contact | May cause temporary eye irritation. |

4.3. Indication of any immediate medical attention and special treatment needed

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| Notes for the doctor | Treat symptomatically. |
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SECTION 5: Firefighting measures

5.1. Extinguishing media

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| Suitable extinguishing media | Water spray, fog or mist. Foam, carbon dioxide or dry powder. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |

5.2. Special hazards arising from the substance or mixture

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|--------------------------------------|--|
| Specific hazards | No unusual fire or explosion hazards noted. |
| Hazardous combustion products | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. |

5.3. Advice for firefighters

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|--|---|
| Protective actions during firefighting | Avoid breathing fire gases or vapours. Keep up-wind to avoid fumes. |
| Special protective equipment for firefighters | Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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| Personal precautions | In case of spills, beware of slippery floors and surfaces. Wear appropriate protective clothing. |
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6.2. Environmental precautions

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| Environmental precautions | Do not discharge into drains or watercourses or onto the ground. |
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6.3. Methods and material for containment and cleaning up

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|--------------------------------|---|
| Methods for cleaning up | Absorb in vermiculite, dry sand or earth and place into containers. |
|--------------------------------|---|

6.4. Reference to other sections

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|------------------------------------|--|
| Reference to other sections | For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see section 13. |
|------------------------------------|--|

SECTION 7: Handling and storage

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7.1. Precautions for safe handling

Usage precautions Avoid contact with eyes and prolonged skin contact. Provide adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class Miscellaneous hazardous material storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

Usage description Pourable/Paintable Coating

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

DIOCTYL TIN DILAUATE

Long-term exposure limit (8-hour TWA): WEL 0.1 mg/m³

Short-term exposure limit (15-minute): WEL 0.2 mg/m³

as Sn

WEL = Workplace Exposure Limit

METHYL-0,0',0"-BUTAN-2-ONE-TRIOXIMOSILANE (CAS: 22984-54-9)

| | |
|-------------|---|
| DNEL | Workers - Inhalation; Long term systemic effects: 0.988 mg/m ³ Workers - Dermal; Long term systemic effects: 0.14 mg/kg/day General population - Inhalation; Long term systemic effects: 0.174 mg/m ³ General population - Dermal; Long term systemic effects: 0.05 mg/kg/day General population - Oral; Long term systemic effects: 0.05 mg/kg/day |
| PNEC | - Fresh water; 0.26 mg/l - Marine water; 0.026 mg/l - Intermittent release; 0.12 mg/l - STP; 10 mg/l - Sediment (Freshwater); 1.02 mg/kg - Sediment (Marinewater); 0.102 mg/kg - Soil; 0.05 mg/kg |

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

All handling should only take place in well-ventilated areas.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Use protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

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Hygiene measures Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated.

Respiratory protection No specific recommendations.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

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|---|---|
| Appearance | Liquid. |
| Colour | Various colours. |
| Odour | Slight. |
| Odour threshold | Not determined. |
| pH | pH (concentrated solution): Not applicable. |
| Melting point | Not applicable. |
| Initial boiling point and range | Not applicable. |
| Flash point | Not applicable. |
| Evaporation rate | Not applicable. |
| Evaporation factor | Not applicable. |
| Upper/lower flammability or explosive limits | Not applicable. |
| Vapour pressure | Not applicable. |
| Vapour density | Not applicable. |
| Relative density | 1.0 @ 20°C |
| Solubility(ies) | Insoluble in water. |
| Partition coefficient | Not applicable. |
| Auto-ignition temperature | Not applicable. |
| Decomposition Temperature | Not determined. |
| Viscosity | <300 P @ 20°C |
| Explosive properties | Not applicable. |
| Oxidising properties | The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising. |

9.2. Other information

Other information Not known.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

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Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Butanone-2-oxime (MEKO) is damaging to nasal membranes in rats and mice at a concentration in excess of 10ppm over a prolonged period of time.

Acute toxicity - oral

Notes (oral LD₅₀) For this endpoint no toxicological data is available for the whole product.

Acute toxicity - dermal

Notes (dermal LD₅₀) For this endpoint no toxicological data is available for the whole product.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) For this endpoint no toxicological data is available for the whole product.

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation The product contains small amounts of sensitising substances which may cause an allergic reaction in sensitive individuals.

Germ cell mutagenicity

Genotoxicity - in vitro Does not contain any substances known to be mutagenic.

Carcinogenicity

Carcinogenicity Does not contain any substances known to be carcinogenic.

Reproductive toxicity

Reproductive toxicity - fertility Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Inhalation No specific health hazards known.

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| Ingestion | May cause discomfort if swallowed. |
| Skin contact | May cause sensitisation by skin contact. |
| Eye contact | May cause temporary eye irritation. |
| Acute and chronic health hazards | Product may cause an allergic reaction in hypersensitive persons. Moisture curing process releases a small amount of butanone-2-oxime (MEKO) which can irritate skin and mucous membranes. Prolonged exposure to large quantities of MEKO may cause irreversible damage to health. |
| Route of entry | Skin and/or eye contact |
| Target organs | Skin |
| Medical symptoms | Allergic rash. |
| Medical considerations | Skin disorders and allergies. |

SECTION 12: Ecological Information

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| Ecotoxicity | In cross-linked state not soluble in water. Easily separable from water by filtration. |
| <u>12.1. Toxicity</u> | |
| Toxicity | There are no data for the product. |
| Acute toxicity - fish | LC ₅₀ , 96 hours: MEKO: 48 mg/l, <i>Lepomis macrochirus</i> (Bluegill) |
| Acute toxicity - aquatic invertebrates | EC ₅₀ , 48 hours: MEKO: 750 mg/l, <i>Daphnia magna</i> |
| Acute toxicity - aquatic plants | IC ₅₀ , 72 hours: mg/l, Fish |
| <u>12.2. Persistence and degradability</u> | |
| Persistence and degradability | The product is not readily biodegradable. |
| <u>12.3. Bioaccumulative potential</u> | |
| Bioaccumulative potential | Bioaccumulation is unlikely to be significant because of the low water-solubility of this product. |
| Partition coefficient | Not applicable. |
| <u>12.4. Mobility in soil</u> | |
| Mobility | The product is insoluble in water. |
| <u>12.5. Results of PBT and vPvB assessment</u> | |
| Results of PBT and vPvB assessment | This product does not contain any substances classified as PBT or vPvB. |
| <u>12.6. Other adverse effects</u> | |
| Other adverse effects | Not known. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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|----------------------------|---|
| General information | When handling waste, the safety precautions applying to handling of the product should be considered. Waste is classified as hazardous waste. |
| Disposal methods | Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. |
| Waste class | Recommended EWC Code 08 04 10 |

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SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

No information required.

14.2. UN proper shipping name

No information required.

14.3. Transport hazard class(es)

No information required.

14.4. Packing group

No information required.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

No information required.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information required.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation Regulation (EC) 1907/2006 REACH (as amended).
Regulation (EC) 1272/2008 CLP (as amended).

Guidance Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments This is first issue.

Revision date 28/04/2017

Revision 1

SDS number 20369

Liquasil Metalseal SF

Hazard statements in full

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H373 May cause damage to organs (Blood) through prolonged or repeated exposure if swallowed.

H373 May cause damage to organs (Blood) through prolonged or repeated exposure if swallowed.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.