

Printing date 03/01/2022 Reviewed on 03/01/2022

### 1: Identification

- · 1.1 Product identifier
- Trade name: SILIKAL Additive M
- · Application of the substance / the preparation:

Additive

Coating material

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Silikal America 609-B Fertilla Street Carrolton, GA 30117

Tel.: 770.830.1404 Fax.: 777.830.9213 info@silikalamerica.com

- · Information department: Silikal America
- 1.4 Emergency telephone number: INFOTRAC 1-800-535-5053

### 2: Hazard(s) identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.Skin Sens. 1 H317 May cause an allergic skin reaction.STOT SE 3 H335 May cause respiratory irritation.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is classified and labeled according to the CLP regulation.

· Hazard pictograms







GHS02 GHS05 GHS07

· Signal word Danger

· Hazard-determining components of labeling:

Phosphoric acid esters methyl methacrylate

· Hazard statements

H225 Highly flammable liquid and vapor.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P280 Wear protective gloves / eye protection / face protection.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

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P501

Dispose of contents/container in accordance with local/regional/national/ international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 3Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 3Fire = 3

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · **vPvB**: Not applicable.

### 3: Composition/information on ingredients

- · 3.2 Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

|   | · Dangerous components: |  |         |
|---|-------------------------|--|---------|
| Ī |                         |  | 50-100% |
|   |                         | ♦ Flam. Liq. 2, H225; ♦ Skin Corr. 1B, H314; Eye Dam. 1, H318                |         |
| Γ |                         | methyl methacrylate  | 25-50%  |
|   |                         | Tlam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335 |         |

· Additional information: For the wording of the listed hazard phrases refer to section 16.

#### 4: First-aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

- · After swallowing: Do not induce vomiting; immediately call for medical help.
- · 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5: Fire-fighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

Foam

Fire-extinguishing powder

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Carbon dioxide

- · For safety reasons unsuitable extinguishing agents: Water
- · 5.2 Special hazards arising from the substance or mixture

No further relevant information available.

- · 5.3 Advice for firefighters
- **Protective equipment:** Wear self-contained respiratory protective device.
- · Additional information Cool endangered receptacles with water spray.

### 6: Accidental release measures

### · 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

Keep away from ignition sources

Use respiratory protective device against the effects of fumes/dust/aerosol.

- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

#### · 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7: Handling and storage

#### · 7.1 Precautions for safe handling

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Use explosion-proof apparatus / fittings and spark-proof tools.

Fumes can combine with air to form an explosive mixture.

#### · 7.2 Conditions for safe storage, including any incompatibilities

- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Store in cool, dry conditions in well sealed receptacles.

- Information about storage in one common storage facility: Store away from oxidizing agents.
- · Further information about storage conditions:

Store receptacle in a well ventilated area.

Protect from heat and direct sunlight.

- · Maximum storage temperature: 25 °C
- 7.3 Specific end use(s) No further relevant information available.

### 8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 Control parameters
- · Components with limit values that require monitoring at the workplace:

### 80-62-6 methyl methacrylate

PEL Long-term value: 410 mg/m³, 100 ppm

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REL Long-term value: 410 mg/m³, 100 ppm

TLV Short-term value: 410 mg/m³, 100 ppm
Long-term value: 205 mg/m³, 50 ppm
DSEN

- · Additional information: The lists that were valid during the creation were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Breathing equipment:

Workplace must be properly ventilated and monitored to maintain air quality below the TLV.

Organic vapour respirators are required only when levels meet or exceed these values. A self contained breathing apparatus is required in confined spaces.

Filter AX or Organic Vapour Cartridge.

- · Recommended filter device for short term use: Filter A
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation (EN 374)

- · Material of gloves Butyl rubber, BR
- · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the mixture of chemicals mentioned below the penetration time has to be at least 300 minutes (Permeation according to EN 374 Part 3: Level 5).

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

### 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Fluid
Color: Yellow tint
Odor: Characteristic
Odor threshold: Not determined.

· **pH-value:** Not determined.

· Change in condition

Melting point/Melting range: < 0 °C (< 32 °F) Boiling point/Boiling range: 100 °C (212 °F)

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|--|--|
| · Flash point:   | 10 °C (50 °F)  |
| · Flammability (solid, gaseous):   | Not applicable.  |
| · Ignition temperature:  | 430 °C (806 °F)  |
| Decomposition temperature:   | Not determined.  |
| Auto igniting:   | Product is not selfigniting.   |
| Danger of explosion:   | Product is not explosive. However, formation of explosive air/vapor mixtures are possible. |
| · Explosion limits:<br>Lower:<br>Upper:  | 2.1 Vol %<br>12.5 Vol %  |
| · Vapor pressure at 20 °C (68 °F):   | 38.7 hPa (29 mm Hg)  |
| · Density at 20 °C (68 °F):<br>· Relative density<br>· Vapor density<br>· Evaporation rate | 1.21 g/cm³ (10.097 lbs/gal)<br>Not determined.<br>Not determined.<br>Not determined.       |
| · Solubility in / Miscibility with<br>Water at 20 °C (68 °F):                              | 40 g/l   |
| · Partition coefficient (n-octanol/wate  | er): Not determined.   |
| <ul> <li>Viscosity:</li> <li>Dynamic at 20 °C (68 °F):</li> <li>Kinematic:</li> </ul>      | 55 mPas<br>Not determined.   |
| · Solvent content:<br>Organic solvents:<br>· 9.2 Other information                         | 0.0 %<br>No further relevant information available.  |

### 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

Exothermic polymerization.

Reacts with acids, alkalis and oxidizing agents.

- 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials:

Reacts with peroxides and other radical forming substances.

Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.

- 10.6 Hazardous decomposition products: No dangerous decomposition products known.
- · Additional information: Do not allow to enter sewers/ surface or ground water.

### 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.

|                                   | · LD/LC50 values that are relevant for classification: |
|-----------------------------------|--|
| 52628-03-2 Phosphoric acid esters |  |
|                                   | Oral LD50 > 2000 mg/kg (rat)                           |

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· Primary irritant effect:

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- · on the skin:

Causes severe skin burns and eye damage.

· on the eye:

Causes serious eye damage.

· Sensitization:

May cause an allergic skin reaction.

- · Additional toxicological information:
- · Carcinogenic categories

80-62-6 methyl methacrylate

3

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

### 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

### 52628-03-2 Phosphoric acid esters

LC50 (96h) | > 100 mg/l (fish)

EC50 (48h) > 100 mg/l (Daphnia magna)

- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · **vPvB**: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

### 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation:

Must be specially treated adhering to official regulations.

Must not be disposed of together with household garbage. Do not allow product to reach sewage

- · Uncleaned packagings:
- · Recommendation:

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper

Non contaminated packagings can be used for recycling.

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| 14: Transport information                            |   |  |
|--|---|--|
| · 14.1 UN-Number<br>· DOT, ADR, IMDG, IATA           | UN2924  |  |
| · 14.2 UN proper shipping name<br>· DOT, IATA        | Flammable liquids, corrosive, n.o.s. (Meth methacrylate monomer, stabilized, Phosphoric ac esters)        |  |
| · ADR  | 2924 Flammable liquids, corrosive, n.o.s. (Meth methacrylate monomer, stabilized, Phosphoric ac esters)   |  |
| · IMDG   | FLAMMABLE LIQUID, CORROSIVE, N.O.S<br>(METHYL METHACRYLATE MONOMER<br>STABILIZED, Phosphoric acid esters) |  |
| · 14.3 Transport hazard class(es)                    |   |  |
| PLAMMARIE LUDIO  COORROSIVE  3                       |   |  |
| · Class<br>· Label                                   | 3 Flammable liquids   |  |
| · ADR  | 3 Flammable liquids   |  |
| · Label  | 3+8   |  |
| Si Si Si   |   |  |
| · Class<br>· Label                                   | 3 Flammable liquids<br>3/8  |  |
| ·IATA  |   |  |
| · Class<br>· Label                                   | 3 Flammable liquids<br>3 (8)  |  |
| · 14.4 Packing group<br>· DOT, ADR, IMDG, IATA       | II  |  |
| · 14.5 Environmental hazards:<br>· Marine pollutant: | No  |  |
| 14.6 Special precautions for user                    | Warning: Flammable liquids  |  |
| · Danger code (Kemler):<br>· EMS Number:             | 338<br>F-E,S-C  |  |
| · Segregation groups                                 | Acids   |  |

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|---|--|
| · Stowage Category<br>· Stowage Code                                      | B<br>SW2 Clear of living quarters.   |
| · 14.7 Transport in bulk according to Ann of MARPOL73/78 and the IBC Code | ex II  Not applicable.   |
| · Transport/Additional information:                                       |  |
| · ADR<br>· Excepted quantities (EQ)                                       | Code: E2  Maximum net quantity per inner packaging: 30 ml  Maximum net quantity per outer packaging: 500 m                     |
| · IMDG<br>· Limited quantities (LQ)<br>· Excepted quantities (EQ)         | 1L<br>Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 m           |
| · UN "Model Regulation":  | UN 2924 FLAMMABLE LIQUIDS, CORROSIVE<br>N.O.S. (METHYL METHACRYLATE MONOMER<br>STABILIZED, PHOSPHORIC ACID ESTERS),<br>(8), II |

### 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara

| · Section 355 (ex | tremely hazardous | substances): |
|-------------------|-------------------|--------------|

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

80-62-6 methyl methacrylate

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

80-62-6 methyl methacrylate

E, NL

TLV (Threshold Limit Value established by ACGIH)

80-62-6 methyl methacrylate

A4

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

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NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· AGW (German Workplace Threshold Value)

80-62-6 methyl methacrylate

- · National regulations:
- · Technical instructions (air):

| Class | Share in % |
|-------|------------|
| NK    | 25-50      |

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Silikal America
- · Date of preparation / last revision 04/27/2016 / 8
- Abbreviations and acronyms:

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

\* Data compared to the previous version altered.