

Safety Data Sheet

according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 1 of 15

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

1.1. Product identifier

KAISERLING's Fixative

UFI: 9XCW-J0VX-400D-E5N9

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

Use of the substance/mixture

Use as laboratory reagent. The product is intended for research, analysis and scientific education.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name: MORPHISTO GmbH
Street: Schumannstr. 142/144
Place: D-63069 Offenbach

Telephone: +49 (0) 69 / 400 3019-60 Telefax: +49 (0) 69 / 400 3019-64

E-mail: info@morphisto.de
Contact person: Morphisto GmbH

E-mail: gefahrstoffmanagement@morphisto.de

Internet: http://www.morphisto.de

1.4. Emergency telephone Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Muta. 2; H341 Carc. 1B; H350 STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

formaldehyde% methanol

Signal word: Danger

Pictograms:





Hazard statements

H302 Harmful if swallowed. H315 Causes skin irritation.

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



according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 2 of 15

H335 May cause respiratory irritation.H341 Suspected of causing genetic defects.

H350 May cause cancer.

Precautionary statements

P201 Obtain special instructions before use.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

Special labelling of certain mixtures

Restricted to professional users.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:





Hazard statements

H317-H341-H350

Precautionary statements

P201-P280-P308+P313

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

| CAS No | Chemical name | | | Quantity |
|---------|---|--|-----------------------------------|-----------|
| | EC No | Index No | REACH No | |
| | Classification (GB CLP | Regulation) | | |
| 50-00-0 | formaldehyde% | | | |
| | 200-001-8 | 605-001-00-5 | 01-2119488953-20 | |
| | Carc. 1B, Muta. 2, Acu H341 H331 H311 H301 | te Tox. 3, Acute Tox. 3, Acute Tox. 3, H314 H317 | Skin Corr. 1B, Skin Sens. 1; H350 | |
| 67-56-1 | methanol | | | 1 - < 5 % |
| | 200-659-6 | 603-001-00-X | 01-2119433307-44 | |
| | Flam. Liq. 2, Acute Tox | a. 3, Acute Tox. 3, Acute Tox. 3, STOT | SE 1; H225 H331 H311 H301 H370 | |

Full text of H and EUH statements: see section 16.



Safety Data Sheet

according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 3 of 15

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|---------|------------------|---|------------|
| | Specific Conc. I | Limits, M-factors and ATE | |
| 50-00-0 | 200-001-8 | formaldehyde% | 5 - < 10 % |
| | 292 mg/kg; oral | 0 = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: LD50 = : LD50 = 100 mg/kg | |
| 67-56-1 | 200-659-6 | methanol | 1 - < 5 % |
| | | 0 = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: LD50 = : LD50 = 100 mg/kg STOT SE 1; H370: >= 10 - 100 STOT SE 2; H371: >= 3 - | |

Further Information

This product contains no substances of very high concern (SVHC) (>0,1%) which are included in the Candidate List according to Article 59 of REACH.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice. In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Atomized water.

Unsuitable extinguishing media

High power water jet.



Safety Data Sheet

according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 4 of 15

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2).

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Eliminate leaks immediately. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Wear suitable protective clothing. (See section 8.) Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product. Street clothing should be stored seperately from work clothing.

Further information on handling

General protection and hygiene measures: refer to chapter 8

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide



according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 5 of 15

adequate ventilation as well as local exhaustion at critical locations.

Hints on joint storage

Do not store together with: Explosives. Gas. Oxidizing liquids. Oxidizing solids. Self-reactive substances and mixtures. Organic peroxides. Ammonium nitrate. Combustible toxic substances. Non-combustible toxic substances. Radioactive substances. Infectious substances.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.

Recommended storage temperature: 15-25 °C

Protect against: frost. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m³ | fibres/ml | Category | Origin |
|---------|--------------|-----|-------|-----------|---------------|--------|
| 50-00-0 | Formaldehyde | 2 | 2.5 | | TWA (8 h) | WEL |
| | | 2 | 2.5 | ĺ | STEL (15 min) | WEL |
| 67-56-1 | Methanol | 200 | 266 | | TWA (8 h) | WEL |
| | | 250 | 333 | | STEL (15 min) | WEL |

DNEL/DMEL values

| CAS No | Substance | | | |
|------------------------|--------------------|----------------|----------|--------------------------|
| DNEL type | | Exposure route | Effect | Value |
| 50-00-0 | formaldehyde% | | | |
| Worker DNEL, | acute | inhalation | systemic | 1 mg/m³ |
| Worker DNEL, | long-term | dermal | systemic | 240 mg/kg bw/day |
| Worker DNEL, | long-term | inhalation | systemic | 0,5 mg/m³ |
| Worker DNEL, | long-term | inhalation | local | 0,375 mg/m³ |
| Worker DNEL, acute | | inhalation | local | 0,75 mg/m³ |
| Worker DNEL, | long-term | dermal | local | 0,037 mg/cm ² |
| 67-56-1 | methanol | | | |
| Worker DNEL, | acute | inhalation | local | 260 mg/m³ |
| Worker DNEL, | acute | dermal | systemic | 40 mg/kg bw/day |
| Worker DNEL, | Worker DNEL, acute | | systemic | 260 mg/m³ |
| Worker DNEL, long-term | | inhalation | local | 260 mg/m³ |
| Worker DNEL, | long-term | dermal | systemic | 40 mg/kg bw/day |
| Worker DNEL, | long-term | inhalation | systemic | 260 mg/m³ |



Safety Data Sheet

according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 6 of 15

PNEC values

| CAS No | Substance | |
|-------------|---------------------------------------|------------|
| Environmen | tal compartment | Value |
| 50-00-0 | formaldehyde% | |
| Freshwater | | 0,44 mg/l |
| Freshwater | (intermittent releases) | 4,44 mg/l |
| Marine wate | г | 0,44 mg/l |
| Freshwater | sediment | 2,3 mg/kg |
| Marine sedi | ment | 2,3 mg/kg |
| Micro-organ | isms in sewage treatment plants (STP) | 0,19 mg/l |
| Soil | | 0,2 mg/kg |
| 67-56-1 | methanol | |
| Freshwater | | 20,8 mg/l |
| Marine wate | г | 2,08 mg/l |
| Marine wate | r (intermittent releases) | 1540 mg/l |
| Freshwater | sediment | 77 mg/kg |
| Marine sedi | ment | 7,7 mg/kg |
| Micro-organ | isms in sewage treatment plants (STP) | 100 mg/l |
| Soil | | 3,18 mg/kg |

8.2. Exposure controls





Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation as well as local exhaustion at critical locations. Process within closed systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles. Wear safety glasses; chemical goggles (if splashing is possible). EN 166

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time >= 8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time >= 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h



Safety Data Sheet

according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 7 of 15

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Use of protective clothing. Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

In case of inadequate ventilation wear respiratory protection. With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

Insufficient ventilation.

Release of: product.

exceeding exposure limit values

Suitable respiratory protective equipment:

Combination filtering device (EN 14387); Type: A-P3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Details on the requirements for use and maximum concentrations can be found in the "Rules for the use of respiratory protective devices" (BGR 190).

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid

Colour: colourless, clear Odour: characteristic

Melting point/freezing point:

Boiling point or initial boiling point and

not determined
not determined

boiling range:

Flammability: not determined Lower explosion limits: not determined Upper explosion limits: not determined Flash point: > 62 °C Auto-ignition temperature: not determined Decomposition temperature: not determined pH-Value (at 20 °C): 7-8 Viscosity / kinematic: not determined Water solubility: not determined

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

Vapour pressure:

Density (at 20 °C):

Relative vapour density:

Particle characteristics:

not determined

1,02 g/cm³

not determined

not determined

not applicable

9.2. Other information

Information with regard to physical hazard classes



Safety Data Sheet

according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 8 of 15

Explosive properties

The product is not: Explosive.

Sustaining combustion: Not sustaining combustion

Self-ignition temperature

Gas: not determined

Oxidizing properties

none

Other safety characteristics

Evaporation rate: not determined Solvent separation test: not determined Solvent content: not determined Solid content: not determined Sublimation point: not determined Softening point: not determined Pour point: not determined Viscosity / dynamic: not determined Flow time: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Refer to chapter 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2). Phosphorus oxides. Formaldehyde.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Harmful if swallowed.

ATEmix calculated

ATE (oral) 1035 mg/kg; ATE (dermal) 3041 mg/kg; ATE (inhalation vapour) 31,06 mg/l; ATE (inhalation dust/mist) 5,177 mg/l



Safety Data Sheet

according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 9 of 15

| CAS No | Chemical name | | | | | |
|---------|-------------------------|---------------|----------|---------|----------------|--------|
| | Exposure route | Dose | | Species | Source | Method |
| 50-00-0 | formaldehyde% | | | | | |
| | oral | LD50 mg/kg | 100 | Rat | GESTIS | |
| | dermal | LD50 mg/kg | 292 | Rabbit | GESTIS | |
| | inhalation (4 h) vapour | LC50 | 3 mg/l | Rat | suppliers SDS. | |
| | inhalation dust/mist | ATE | 0,5 mg/l | | | |
| 67-56-1 | methanol | | | | | |
| | oral | LD50 mg/kg | 100 | Rat | suppliers SDS. | |
| | dermal | LD50 mg/kg | 300 | Rabbit | suppliers SDS. | |
| | inhalation (4 h) vapour | LC50 | 3 mg/l | Rat | suppliers SDS. | |
| | inhalation dust/mist | ATE | 0,5 mg/l | | | |

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (formaldehyde%)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (formaldehyde%)

May cause cancer. (formaldehyde%)

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation. (formaldehyde%)

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain any substance that has endocrine disrupting properties in humans as no ingredient meets the criteria.

Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

SECTION 12: Ecological information

12.1. Toxicity

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



Safety Data Sheet

according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 10 of 15

| CAS No | Chemical name | | | | | | |
|---------|--------------------------|---------------|----------|-----------|------------------------------------|--------------|----------|
| | Aquatic toxicity | Dose | | [h] [d] | Species | Source | Method |
| 50-00-0 | formaldehyde% | | | | | | |
| | Acute fish toxicity | LC50 mg/l | 24,1 | 96 h | Pimephales promelas | ECHA Dossier | |
| | Acute algae toxicity | ErC50 mg/l | 4,89 | 72 h | Desmodesmus subspicatus | ECHA Dossier | |
| | Acute crustacea toxicity | EC50 | 5,8 mg/l | 48 h | Daphnia pulex (water flea) | ECHA Dossier | |
| 67-56-1 | methanol | | | | | | |
| | Acute fish toxicity | LC50 mg/l | 15400 | 96 h | Lepomis macrochirus | ECHA Dossier | |
| | Acute algae toxicity | ErC50 mg/l | 22000 | 96 h | Pseudokirchneriella subcapitata | ECHA Dossier | |
| | Acute crustacea toxicity | EC50 mg/l | >1000 | 48 h | Daphnia magna | ECHA Dossier | OECD 202 |

12.2. Persistence and degradability

The product has not been tested.

| CAS No | Chemical name | | | | | | |
|---------|---|--------------------|----|--------------|--|--|--|
| | Method | Value | d | Source | | | |
| | Evaluation | | - | - | | | |
| 50-00-0 | formaldehyde% | | | | | | |
| | OECD Guideline 301 C | 91 % | 14 | ECHA Dossier | | | |
| | Easily biodegradable (concerning to the criteria of the OECD) | | | | | | |
| | OECD Guideline 301 D | 90 | 28 | ECHA Dossier | | | |
| | Product is biodegradable. | | | | | | |
| 67-56-1 | methanol | | | | | | |
| | other guideline | 96% | 20 | ECHA Dossier | | | |
| | Easily biodegradable (concerning to the crit | teria of the OECD) | - | _ | | | |

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|---------|---------------|---------|
| 50-00-0 | formaldehyde% | 0,35 |
| 67-56-1 | methanol | -0,77 |

BCF

| CAS No | Chemical name | BCF | Species | Source |
|---------|---------------|-----|---------|--------|
| 67-56-1 | methanol | <10 | | |

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

The product has not been tested.



Safety Data Sheet

according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 11 of 15

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging

WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND 150110

> PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by

hazardous substances; hazardous waste

Contaminated packaging

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. 14.2. UN proper shipping name: No dangerous good in sense of this transport regulation. 14.3. Transport hazard class(es):

14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation. 14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.

14.4. Packing group:

Marine transport (IMDG) No dangerous good in sense of this transport regulation. 14.1. UN number or ID number:

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. 14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation. 14.4. Packing group:

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation. 14.2. UN proper shipping name: 14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.



Safety Data Sheet

according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 12 of 15

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Refer to section 6-8

14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

Directive 2010/75/EU on industrial

emissions:

No information available.

Directive 2004/42/EC on VOC in

paints and varnishes:

No information available.

Information according to Directive

2012/18/EU (SEVESO III):

-

Not subject to 2012/18/EU (SEVESO III)

Additional information

aditional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water hazard class (D): 3 - highly hazardous to water

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

Additional information

The product is subject to the Chemicals Prohibition Ordinance (ChemVerbotsV). Observe the requirements and restrictions for handling and dispensing in Section 3 of the ChemVerbotsV, among others.

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out: formaldehyde% methanol

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,7,8,9,11,12,13,15,16.

Rev. 2,0; 05.08.2022, Individual safety data sheet based on 18727_collect

Rev. 2,1; 16.01.2024, general adjustment(s)



according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 13 of 15

Abbreviations and acronyms

Flam. Liq: Flammable liquids Acute Tox: Acute toxicity Skin Corr: Skin corrosion Skin Irrit: Skin irritation Eye Irrit: Eye irritation Skin Sens: Skin sensitisation Muta: Germ cell mutagenicity

Carc: Carcinogenicity

STOT SE: Specific target organ toxicity - single exposure

ADR: Accord européen sur le transport des marchandises dangereuses par Route AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen

AGW: Arbeitsplatzgrenzwert AVV: Abfallverzeichnisverordnung CAS Chemical Abstracts Service

CLP: Classification, Labelling and Packaging of substances and mixtures

DNEL: Derived No Effect Level

d: day(s)

EAKV: Europäisches Abfallverzeichnis gemäß Entwurf Abfallverzeichnisverordnung

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European LIst of Notified Chemical Substances

ECHA: European Chemicals Agency EWC: European Waste Catalogue

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

h: hour

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level NOAEC: No observed adverse effect level

NLP: No-Longer Polymers

N/A: not applicable

OECD: Organisation for Economic Co-operation and Development

PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de

fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

REACH: Registration, Evaluation, Authorisation of Chemicals

SVHC: substance of very high concern TRGS Technische Regeln fuer Gefahrstoffe

UN: United Nations

VOC: Volatile Organic Compounds

VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe

WGK: Wassergefaehrdungsklasse

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations



according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 14 of 15

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

EmS: Emergency Schedules MFAG: Medical First Aid Guide

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety

assessment, chapter R.20 (Table of terms and abbreviations). EC/EEC: European Community/European Economic Community

EU: European Union M-factor: Multiplying factor

IATA: International Air Transport Association DGR: Dangerous Goods Regulations

ICAO: International Civil Aviation Organization

TI: Technical Instructions VOC: volatile organic compound

Classification for mixtures and used evaluation method according to GB CLP Regulation

| Classification | Classification procedure |
|---------------------|--------------------------|
| Acute Tox. 4; H302 | Calculation method |
| Skin Irrit. 2; H315 | Calculation method |
| Eye Irrit. 2; H319 | Calculation method |
| Skin Sens. 1; H317 | Calculation method |
| Muta. 2; H341 | Calculation method |
| Carc. 1B; H350 | Calculation method |
| STOT SE 3; H335 | Calculation method |

Relevant H and EUH statements (number and full text) H225 Highly flammable liquid and vapour.

| - | J , - | | |
|------|---------------|-----------------|--|
| H301 | Toxic if swal | llowed. | |
| H302 | Harmful if sv | vallowed. | |
| H311 | Toxic in con | tact with skin. | |
| | _ | | |

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

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

H331 Toxic if inhaled.



Safety Data Sheet

according to UK REACH Regulation

KAISERLING's Fixative

Revision date: 16.01.2024 Product code: 10249.xxxxx Page 15 of 15

H335 May cause respiratory irritation.H341 Suspected of causing genetic defects.

H350 May cause cancer.

H370 Causes damage to organs.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)