



MATERIAL SAFETY DATA SHEET

METHYL ACETATE

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

1.1. Product identifier

Methyl acetate

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

Relevant identified uses: Chemical used in synthesis and/or formulation of industrial products

For the detailed identified uses of the product see appendix of the safety data sheet.

1.3. Details of the supplier of the safety data sheet

Shrine Chemicals

1.4. Emergency telephone number

International emergency number: +971 4 880 6072

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Flam. Liq. 2

Acute Tox. 3 (Inhalation - vapour)
Acute Tox. 3 (oral)
Acute Tox. 3 (dermal)Eye
Dam./Irrit. 2
STOT SE (Central nervous system, Optic nerve) 1
STOT SE 3 (Vapours may cause drowsiness and dizziness.)

According to Directive 67/548/EEC or 1999/45/EC

Possible Hazards:

Highly flammable.

Irritating to eyes.

Toxic by inhalation, in contact with skin and if swallowed.

Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

Repeated exposure may cause skin dryness or cracking.

Vapours may cause drowsiness and dizziness.

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]

Pictogram:



Signal Word:

Danger

Hazard Statement:

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H301 Toxic if swallowed.

H336 May cause drowsiness or dizziness.

H370 Causes damage to organs.

Precautionary Statements (Prevention):



P280	Wear protective gloves and eye/face protection.
P271	Use only outdoors or in a well-ventilated area.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/gas/mist/vapours.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P270	Do not eat, drink or smoke when using this product.
P264	Wash with plenty of water and soap thoroughly after handling.
P242	Use only non-sparking tools.
P240	Ground/bond container and receiving equipment.

Precautionary Statements (Response):

P310	Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P361 + P364	Remove/Take off immediately all contaminated clothing and wash before reuse.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P330	Rinse mouth.
P370 + P378	In case of fire: Use water spray, dry powder, foam or carbon dioxide for extinction.

Precautionary Statements (Storage):

P403 + P235	Store in a well-ventilated place. Keep cool.
P233	Keep container tightly closed.
P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
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Labeling of special preparations (GHS):

EUH066: Repeated exposure may cause skin dryness or cracking.

According to Regulation (EC) No 1272/2008 [CLP]

Hazard determining component(s) for labelling: METHYLACETATE, METHANOL

According to Directive 67/548/EEC or 1999/45/EC

Directive 1999/45/EC ('Preparation Directive')



SHRINE CHEMICALS

Hazard symbol(s)

F Highly flammable.



T Toxic.



R-phrases(s)

R11

Highly flammable.

R23/24/25

Toxic by inhalation, in contact with skin and if swallowed.

R39/23/24/25

Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

R36

Irritating to eyes.

R66

Repeated exposure may cause skin dryness or cracking.

R67

Vapours may cause drowsiness and dizziness.

S-phrases(s)

S7

Keep container tightly closed.

S16

Keep away from sources of ignition - No smoking.

S33

Take precautionary measures against static discharges.

S36/37/39

Wear suitable protective clothing, gloves and eye/face protection.

S45

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S51

Use only in well-ventilated areas.

Hazard determining component(s) for labelling: METHYLACETATE, METHANOL

2.1. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

See section 12 - Results of PBT and vPvB assessment.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

esters

dissolved in: methanol

Hazardous ingredients (GHS)



SHRINE CHEMICALS

according to Regulation (EC) No. 1272/2008

methanol

Content (W/W): $\geq 20\%$ - $\leq 30\%$ Flam. Liq. 2
CAS Number: 67-56-1 Acute Tox. 3 (Inhalation - vapour)
EC-Number: 200-659-6 Acute Tox. 3 (oral)
REACH registration number: 01- Acute Tox. 3 (dermal)
2119433307-44 STOT SE (Central nervous system, Optic nerve)
INDEX-Number: 603-001-00-X 1
H225, H311, H331, H301, H370

Specific concentration limit:
STOT SE 2: 3 - $< 10\%$
STOT SE 1: $\geq 10\%$

methyl acetate

Content (W/W): $\geq 70\%$ - $\leq 80\%$ Flam. Liq. 2
CAS Number: 79-20-9 Eye Dam./Irrit. 2
EC-Number: 201-185-2 STOT SE 3 (drowsiness and dizziness)
REACH registration number: 01- H225, H319, H336
2119459211-47 EUH066
INDEX-Number: 607-021-00-X

tetrahydrofuran

Content (W/W): $\geq 0.5\%$ - $< 1\%$ Flam. Liq. 2
CAS Number: 109-99-9 Acute Tox. 4 (oral)
EC-Number: 203-726-8 Eye Dam./Irrit. 2
REACH registration number: 01- Carc. 2
2119444314-46 STOT SE 3 (drowsiness and dizziness)
INDEX-Number: 603-025-00-0 STOT SE 3 (irr. to respiratory syst.)
H225, H319, H302, H336, H335, H351
EUH019

Differing classification according to current knowledge and the criteria given in Annex I of Regulation (EC) No. 1272/2008
Flam. Liq. 2
Acute Tox. 4 (oral)
Eye Dam./Irrit. 1
Carc. 2
STOT SE 3 (drowsiness and dizziness)
STOT SE 3 (irr. to respiratory syst.)
H225, H318, H302, H336, H335, H351
EUH019

Specific concentration limit:
Eye Dam./Irrit. 2: $\geq 25\%$
STOT SE 3, irr. to respiratory syst.: $\geq 25\%$



dimethyl ether

Content (W/W): $\geq 0.2\%$ - $\leq 2.5\%$ Press. Gas Liquef. Gas
Flam. gases (incl. chem. unstable gases) 1
CAS Number: 115-10-6 H280, H220
EC-Number: 204-065-8
REACH registration number: 01-211942128-37 Exception community workplace exposure limit
(see section 8)
INDEX-Number: 603-019-00-8

Hazardous ingredients

according to Directive 1999/45/EC

methyl acetate

Content (W/W): $\geq 70\%$ - $\leq 80\%$
CAS Number: 79-20-9
EC-Number: 201-185-2
REACH registration number: 01-2119459211-47
INDEX-Number: 607-021-00-X
Hazard symbol(s): F, Xi
R-phrases: 11, 36, 66, 67

methanol

Content (W/W): $\geq 20\%$ - $\leq 30\%$
CAS Number: 67-56-1
EC-Number: 200-659-6
REACH registration number: 01-2119433307-44
INDEX-Number: 603-001-00-X
Hazard symbol(s): F, T
R-phrases: 11, 23/24/25, 39/23/24/25

dimethyl ether

Content (W/W): $\geq 0.2\%$ - $\leq 2.5\%$
CAS Number: 115-10-6
EC-Number: 204-065-8
REACH registration number: 01-211942128-37
INDEX-Number: 603-019-00-8
Hazard symbol(s): F+
R-phrases: 12
Exception community workplace exposure limit (see section 8)

tetrahydrofuran

Content (W/W): $\geq 0.5\%$ - $< 1\%$
CAS Number: 109-99-9
EC-Number: 203-726-8
REACH registration number: 01-2119444314-46
INDEX-Number: 603-025-00-0
Hazard symbol(s): F, Xn
R-phrases: 11, 19, 22, 40, 36/37, 67



SECTION 4: First-Aid Measures

4.1. Description of first aid measures

Immediately remove contaminated clothing. If danger of loss of consciousness, place patient in recovery position and transport accordingly. Apply artificial respiration if necessary. First aid personnel should pay attention to their own safety.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Rinse mouth immediately and then drink plenty of water, seek medical attention. Administer 50 ml of pure ethanol in a drinkable concentration. Seek medical attention.

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

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further symptoms are possible

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

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote. Pulmonary odema prophylaxis. Medical monitoring for at least 24 hours.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

5.2. Special hazards arising from the substance or mixture

carbon oxides, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire. Under certain conditions in case of fire other hazardous combustion products may be generated. Vapours may form explosive mixture with air.

5.3. Advice for fire-fighters

Special protective equipment



Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Keep containers cool by spraying with water if exposed to fire.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Breathing protection required. Avoid contact with the skin, eyes and clothing.

6.2. Environmental precautions

Do not empty into drains.

6.3. Methods and material for containment and cleaning up

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in accordance with regulations.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Handle in accordance with good industrial hygiene and safety practice. Remove contaminated clothing and protective equipment before entering eating areas. Hands and/or face should be washed before breaks and at the end of the shift. When using do not eat, drink or smoke.

Protection against fire and explosion:

Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed in a cool, well-ventilated place.

Storage stability:

Storage duration: 24 Months

From the data on storage duration in this safety data sheet no agreed statement regarding the warranty of application properties can be deduced.

7.3. Specific end use(s)

See exposure scenario(s) in the attachment to this safety data sheet.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

67-56-1: methanol

TWA value 260 mg/m³ ; 200 ppm (OEL (EU))
indicative
Skin Designation (OEL (EU))
The substance can be absorbed through the skin.

79-20-9: methyl acetate

109-99-9: tetrahydrofuran

TWA value 150 mg/m³ ; 50 ppm (OEL (EU))
indicative
STEL value 300 mg/m³ ; 100 ppm (OEL (EU))
indicative
Skin Designation (OEL (EU))
The substance can be absorbed through the skin.

115-10-6: dimethyl ether

TWA value 1,920 mg/m³ ; 1,000 ppm (OEL (EU))
indicative

8.2. Exposure controls

Personal protective equipment

Respiratory protection:

Breathing protection if gases/vapours are formed. Gas filter for gases/vapours of organic compounds (boiling point <65 °C, f.e. EN 14387 Type AX)

Consider the risk management measures as outlined in the exposure scenario.

Hand protection:

Suitable materials for short-term contact (recommended: At least protective index 2, corresponding >30 minutes of permeation time according to EN 374)

butyl rubber (butyl) - 0.7 mm coating thickness

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

chemical-protection suit (f.e. according to EN 14605)



General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin. Avoid inhalation of vapour. Wearing of closed work clothing is required additionally to the stated personal protection equipment. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Form:	liquid
Colour:	colourless to yellow
Odour:	perceptible
Odour threshold:	Not determined since toxic by inhalation.
pH value:	5.2 (10 g/l, 20 °C)
Melting point:	-98 °C
Boiling point:	52 - 57 °C
Flash point:	-23 °C (DIN 51755)
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.
Flammability:	Highly flammable liquid and vapour.
Lower explosion limit:	For liquids not relevant for classification and labelling., The lower explosion point may be 5 - 15 °C below the flash point.
Upper explosion limit:	For liquids not relevant for classification and labelling.
Ignition temperature:	500 °C
Vapour pressure:	252 mbar (20 °C) 882 mbar (50 °C)
Density:	0.91 g/cm ³ (15 °C) 0.868 g/cm ³ (50 °C) 0.861 g/cm ³ (55 °C)
Relative vapour density (air):	not relevant



SHRINE CHEMICALS

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Density:	0.91 g/cm ³ (15 °C) 0.868 g/cm ³ (50 °C) 0.861 g/cm ³ (55 °C)
Relative vapour density (air):	not relevant

Solubility in water:	miscible (20 °C)	
Partitioning coefficient n-octanol/water (log Kow):	0.18 (25 °C) Literature data.	(Calculation Hansch/Leo)
Thermal decomposition:	255 °C, 100 kJ/kg, Thermal decomposition above the indicated temperature is possible. It is not a self-decompositionable substance.	
Viscosity, dynamic:	0.364 mPa.s (20 °C) Information based on the main components., Literature data.	
Explosion hazard:	not explosive	(other)
Fire promoting properties:	not fire-propagating	

9.1. Other information

Information on: methyl acetate

Volatility/water - air:

(calculated)

Adsorption/water - soil: KOC: 12.99; log KOC: 0.18

(OECD Guideline 121)

Information on: methanol

Volatility/water - air:

(calculated)

Adsorption/water - soil: KOC: 1

(calculated)

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Formation of flammable gases:

Remarks:

Forms no flammable gases in the presence of water.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

Formation of explosive gas/air mixtures.

10.4. Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static charge.

10.5. Incompatible materials

Substances to avoid: strong oxidizing agents



10.1. Hazardous decomposition products

No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Of high toxicity after short-term skin contact. Of high toxicity after single ingestion. Of high toxicity after short-term inhalation.

Information on: methyl acetate

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Information on: methanol Assessment of acute toxicity:

Of high toxicity after single ingestion. Of high toxicity after short-term inhalation. Of high toxicity after short-term skin contact.

Information on: methyl acetate

Experimental/calculated data:

LD50 rat (oral): 6,482 mg/kg (similar to OECD guideline 401)

Literature data.

Information on: methanol

Experimental/calculated data:

LD50 rat (oral): > 1187 - 2769 mg/kg

Information on: methyl acetate

Experimental/calculated data:

LC50 rabbit (by inhalation): > 49.2 mg/l 4 h

Literature data. The vapour was tested.

Information on: methanol

Experimental/calculated data:

LC50 rat (by inhalation): 128,2 mg/l 4 h

Information on: methyl acetate

Experimental/calculated data:



*LD50 rat (dermal): > 2,000 mg/kg (OECD Guideline 402)
Limit concentration test only (LIMIT test). No mortality was observed.*

Irritation

Assessment of irritating effects:
Eye contact causes irritation.

Experimental/calculated data:
Serious eye damage/irritation: The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: methyl acetate
Assessment of irritating effects:
Not irritating to the skin. Eye contact causes irritation.*

*Information on: methanol Assessment
of irritating effects:
Not irritating to the skin. Not irritating to the eyes. Exposure to high concentrations can cause eye, skin or respiratory irritations.*

Respiratory/Skin sensitization

*Information on: methyl acetate
Assessment of sensitization:
The substance did not cause skin sensitization in humans.*

Germ cell mutagenicity

*Information on: methyl acetate
Assessment of mutagenicity:
The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in a test with mammals. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.*

Carcinogenicity

*Information on: methanol Assessment
of carcinogenicity:
In long-term studies in rats and mice in which the substance was given by inhalation, a carcinogenic effect was not observed. In long-term animal studies in which the substance was given in the drinking water in high concentrations, a carcinogenic effect was observed. These effects are not relevant to humans at occupational levels of exposure.*

Information on: methyl acetate



Assessment of carcinogenicity:

The whole of the information assessable provides no indication of a carcinogenic effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Reproductive toxicity

Information on: methyl acetate Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Developmental toxicity

Assessment of teratogenicity:

A teratogenic potential cannot be excluded. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: methyl acetate

Assessment of teratogenicity:

Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

A single exposure may have relevant toxic effects on organs.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Possible narcotic effects (drowsiness or dizziness).

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Information on: methyl acetate Assessment of repeated dose toxicity:

After repeated exposure the prominent effect is local irritation. No substance-specific organ toxicity was observed after repeated administration to animals.

Information on: methanol

Assessment of repeated dose toxicity:

The substance may cause blindness after repeated ingestion. The substance may cause blindness after repeated inhalation.

Other relevant toxicity information

The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

Information on: methyl acetate

The product/substance will be cleaved in the body after uptake, thereby methanol will be formed. The toxicity of methanol has to be considered. Has a degreasing effect on skin.

SECTION 12: Ecological Information

12.1. Toxicity

Information on: methyl acetate

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Information on: methanol Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Information on: methyl acetate

Toxicity to fish:

LC50 (96 h) 250 - 350 mg/l, Brachydanio rerio (OECD 203; ISO 7346; 84/449/EEC, C.1, Flow through.)

The details of the toxic effect relate to the nominal concentration.

Information on: methanol

Toxicity to fish:

LC50 (96 h) 15,400 mg/l, Lepomis macrochirus (other, Flow through.)

Information on: methyl acetate

Aquatic invertebrates:

EC50 (48 h) 1,027 mg/l, Daphnia magna (OECD Guideline 202, part 1, static) The details of the toxic effect relate to the nominal concentration.

Information on: methanol

Aquatic invertebrates:

EC50 (48 h) > 10,000 mg/l, Daphnia magna (DIN 38412 Part 11, static)



SHRINE CHEMICALS

Information on: methyl acetate

Aquatic plants:

EC50 (72 h) > 120 mg/l (growth rate), Scenedesmus subspicatus (OECD Guideline 201, static) The details of the toxic effect relate to the nominal concentration.

Information on: methyl acetate

Microorganisms/Effect on activated sludge:

EC10 (16 h) 1,830 mg/l, Pseudomonas sp. (DIN 38412 Part 8)

The details of the toxic effect relate to the nominal concentration. Literature data.

Information on: methyl acetate

Assessment of terrestrial toxicity:

Study scientifically not justified.

Information on: methanol/Soil

living organisms:

LC50 (48 h) > 1 mg/cm², Eisenia foetida (OECD Guideline 207, filter paper)

12.2. Persistence and degradability

Information on: methyl acetate

Assessment biodegradation and elimination (H₂O): Readily biodegradable (according to OECD criteria).

Information on: methyl acetate

Elimination information:

> 70 % BOD of the ThOD (28 d) (OECD 301D; EEC 92/69, C.4-E) (aerobic, activated sludge, domestic, non-adapted)

Information on: methanol

Elimination information:

95 % BOD of the ThOD (20 d) (OECD 301D; EEC 92/69, C.4-E) (aerobic, activated sludge, domestic, non-adapted) Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

Information on: methyl acetate Assessment

bioaccumulation potential:

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Information on: methanol

Assessment bioaccumulation potential:

Significant accumulation in organisms is not to be expected.

12.4. Mobility in soil

Information on: methyl acetate

Assessment transport between environmental compartments:

Volatility: The substance will slowly evaporate into the atmosphere from the water surface.

Adsorption in soil: Adsorption to solid soil phase is not expected.

Information on: methanol

Assessment transport between environmental compartments:

Volatility: The substance will not evaporate into the atmosphere from the water surface.

Adsorption in soil: Adsorption to solid soil phase is not expected.

Information on: tetrahydrofuran

Assessment transport between environmental compartments:

Volatility: The substance will slowly evaporate into the atmosphere from the water surface.

Adsorption in soil: Adsorption to solid soil phase is not expected.

12.5. Results of PBT and vPvB assessment

under evaluation

12.6. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

12.7. Additional information

Other ecotoxicological advice:

Due to the pH-value of the product, neutralization is generally required before discharging sewage into treatment plants. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. Do not release untreated into natural waters.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Incinerate in suitable incineration plant, observing local authority regulations.

A waste code in accordance with the European waste catalog (EWC) cannot be specified, due to dependence on the usage.

The waste code in accordance with the European waste catalog (EWC) must be specified in cooperation with disposal agency/manufacturer/authorities.

Contaminated packaging:



Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

SECTION 14: Transport Information

Land transport

ADR

UN number: UN1992
UN proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (contains METHANOL, METHYLACETATE)
Transport hazard class(es): 3, 6.1
Packing group: II
Environmental hazards: no
Special precautions for user: Tunnel code: D/E

RID

UN number: UN1992
UN proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (contains METHANOL, METHYLACETATE)
Transport hazard class(es): 3, 6.1
Packing group: II
Environmental hazards: no
Special precautions for user: None known

Inland waterway transport

ADN

UN number: UN1992
UN proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (contains METHANOL, METHYLACETATE)
Transport hazard class(es): 3, 6.1
Packing group: II
Environmental hazards: no
Special precautions for user: None known
Transport in inland waterway vessel: Not evaluated

Sea transport

IMDG



UN number: UN 1992
UN proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (contains METHANOL, METHYLACETATE)
Transport hazard class(es): 3, 6.1
Packing group: II
Environmental hazards: no
Marine pollutant: NO
Special precautions for user: None known

Air transport

IATA/ICAO

UN number: UN 1992
UN proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (contains METHANOL, METHYLACETATE)
Transport hazard class(es): 3, 6.1
Packing group: II
Environmental hazards: No Mark as dangerous for the environment is needed
Special precautions for user: None known

14.1. UN number

See corresponding entries for "UN number" for the respective regulations in the tables above.

14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Regulation: Not evaluated



SHRINE CHEMICALS

Shipment approved: Not evaluated
Pollution name: Not evaluated
Pollution category: Not evaluated
Ship Type: Not evaluated

SECTION 15: Regulatory Information

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

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 28, 40

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2. Chemical Safety Assessment

Chemical Safety Assessment performed

SECTION 16: Other Information

Full text of the classifications, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, if mentioned in section 2 or 3:

F	Highly flammable.
Xi	Irritant.
T	Toxic.
F+	Extremely flammable.
Xn	Harmful.
11	Highly flammable.
36	Irritating to eyes.
66	Repeated exposure may cause skin dryness or cracking.
67	Vapours may cause drowsiness and dizziness.
23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
12	Extremely flammable.
19	May form explosive peroxides.
22	Harmful if swallowed.
40	Limited evidence of a carcinogenic effect.
36/37	Irritating to eyes and respiratory system.
Flam. Liq.	Flammable liquids
Acute Tox.	Acute toxicity
Eye Dam./Irrit.	Serious eye damage/eye irritation
STOT SE	Specific target organ toxicity — single exposure
Carc.	Carcinogenicity
Press. Gas	Gases under pressure
Flam. gases (incl. chem.	Flammable gases (including chemically unstable gases)



SHRINE CHEMICALS

unstable gases)

H225	Highly flammable liquid and vapour.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H370	Causes damage to organs (Central nervous system, Optic nerve).
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H302	Harmful if swallowed.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H318	Causes serious eye damage.
H280	Contains gas under pressure; may explode if heated.
H220	Extremely flammable gas.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH019	May form explosive peroxides.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.