

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

JANSEN 

Article No.: 18-3-2
Print date 29.07.2024
Version 64.79

Universal- Thermo-Silber
Revision date 15.02.2024
Issue date 08.01.2024

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

1.1. Product identifier

Article No. (manufacturer/supplier): 18-3-2
Trade name/designation: Universal- Thermo-Silber
silber
seidenmatt
UFI: 7X4M-5J0M-EG0U-HHWT

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

Relevant identified uses:

Varnish / paint

Uses advised against:

Aware of any other information

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

P.A. Jansen GmbH u. Co., KG
Hochstadenstraße 22
D-53474 Bad Neuenahr-Ahrweiler
Telephone: +49 2641 3897-0
Telefax: +49 2641 3897-28
Homepage: www.jansen.de

Department responsible for information:

laboratory
E-mail (competent person) sicherheitsdatenblatt@jansen.de

1.4. Emergency telephone number

Emergency telephone number +49 2641 3897-51
Only available during office hours.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
STOT SE 3 / H335	STOT-single exposure	May cause respiratory irritation.
STOT SE 3 / H336	STOT-single exposure	May cause drowsiness or dizziness.
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Danger

Hazard statements

H226 Flammable liquid and vapour.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 Do NOT induce vomiting.
P370 + P378.6 In case of fire: Use carbon dioxide, extinguishing powder or alcohol-resistant foam to extinguish.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Hazard components for labelling

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Hydrocarbons, C9, aromatics
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics

Supplemental hazard information

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

The mixture contains \geq 0.1 % substances meeting the PBT criteria according to Regulation (EC) No 1907/2006, Annex XIII. See SECTION 3 in this safety data sheet.

The mixture contains \geq 0.1 % substances meeting the vPvB criteria according to Regulation (EC) No 1907/2006, Annex XIII. See SECTION 3 in this safety data sheet.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Description Silicone resin paint with metallic pigment

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

EC No. CAS No. Index No.	REACH No. Designation classification: // Remark	weight-%
918-481-9	01-2119457273-39 Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics Asp. Tox. 1 H304 / EUH066	35 - 50
918-668-5	01-2119455851-35 Hydrocarbons, C9, aromatics Flam. Liq. 3 H226 / STOT SE 3 H335 / Aquatic Chronic 2 H411 / Asp. Tox. 1 H304 / STOT SE 3 H336 / EUH066	15 - 20
231-072-3 7429-90-5 013-002-00-1	01-2119529243-45 Aluminium powder (stabilised) Flam. Sol. 1 H228	10 - 12,5
204-658-1 123-86-4 607-025-00-1	01-2119485493-29 n-butyl acetate Flam. Liq. 3 H226 / STOT SE 3 H336 / EUH066	8 - 10
215-535-7 1330-20-7 601-022-00-9	01-2119488216-32 Xylene Acute Tox. 4 H312 / Acute Tox. 4 H332 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / STOT SE 3 H335 / STOT RE 2 H373 / Asp. Tox. 1 H304 / Flam. Liq. 3 H226 Acute toxicity estimate (ATE): ATE (dermal): 4200 mg/kg bw	5 - 7
202-849-4 100-41-4 601-023-00-4	01-2119489370-35 Ethylbenzene Acute Tox. 4 H332 / STOT RE 2 H373 / Asp. Tox. 1 H304 / Aquatic Chronic 3 H412 / Flam. Liq. 2 H225 Acute toxicity estimate (ATE): ATE (inhalation, vapour): 17,20 mg/L	3 - 5
209-136-7 556-67-2 014-018-00-1	01-2119529238-36 octamethylcyclotetrasiloxane Repr. 2 H361f / Aquatic Chronic 1 H410 (M = 10) / Flam. Liq. 3 H226 PBT- and/or vPvB-substance	< 0,025

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

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Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media

strong water jet

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Do not allow water used to extinguish fire to enter drains, ground or waterways. Cool closed containers that are near the source of the fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Further information

Vapours are heavier than air. Vapours form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not

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empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 5 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

Aluminium powder (stabilised)

Index No. 013-002-00-1 / EC No. 231-072-3 / CAS No. 7429-90-5

WEL, TWA: 4 mg/m³

Remark: (respirable fraction)

WEL, TWA: 10 mg/m³

Remark: (inhalable fraction)

Xylene

Index No. 601-022-00-9 / EC No. 215-535-7 / CAS No. 1330-20-7

WEL, TWA: 220 mg/m³; 50 ppm

WEL, STEL: 441 mg/m³; 100 ppm

Remark: (may be absorbed through the skin)

BMGV, TWA: 650 mmol/mol creatinine

Remark: methyl hippuric acid; urine; end of exposure or end of shift

Ethylbenzene

Index No. 601-023-00-4 / EC No. 202-849-4 / CAS No. 100-41-4

WEL, TWA: 441 mg/m³; 100 ppm

WEL, STEL: 552 mg/m³; 125 ppm

Remark: (may be absorbed through the skin)

Additional information

TWA : Long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

DNEL:

Ethylbenzene

Index No. 601-023-00-4 / EC No. 202-849-4 / CAS No. 100-41-4

DNEL long-term dermal (systemic), Workers: 180 mg/kg

DNEL long-term inhalative (local), Workers: 293 mg/m³

DNEL long-term inhalative (systemic), Workers: 77 mg/m³

DNEL long-term inhalative (local), Workers: 293 mg/m³

DNEL long-term oral (repeated), Consumer: 1,6 mg/kg

DNEL acute inhalative (systemic), Consumer: 15 mg/m³

n-butyl acetate

Index No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4

DNEL acute dermal, short-term (systemic), Workers: 11 mg/kg

DNEL long-term dermal (systemic), Workers: 11 mg/kg

DNEL acute inhalative (local), Workers: 600 mg/m³

DNEL acute inhalative (systemic), Workers: 600 mg/m³

DNEL long-term inhalative (local), Workers: 300 mg/m³

DNEL long-term inhalative (systemic), Workers: 300 mg/m³

DNEL short-term oral (acute), Consumer: 2 mg/kg

DNEL long-term oral (repeated), Consumer: 2 mg/kg

DNEL acute dermal, short-term (systemic), Consumer: 6 mg/kg

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DNEL long-term dermal (systemic), Consumer: 6 mg/kg
DNEL acute inhalative (local), Consumer: 300 mg/m³
DNEL acute inhalative (systemic), Consumer: 300 mg/m³
DNEL long-term inhalative (local), Consumer: 35,7 mg/m³
DNEL long-term inhalative (systemic), Consumer: 35,7 mg/m³

Aluminium powder (stabilised)
Index No. 013-002-00-1 / EC No. 231-072-3 / CAS No. 7429-90-5
DNEL long-term inhalative (local), Workers: 3,72 mg/m³
DNEL long-term inhalative (systemic), Workers: 3,72 mg/m³
DNEL long-term oral (repeated), Consumer: 3,95 mg/kg

octamethylcyclotetrasiloxane
Index No. 014-018-00-1 / EC No. 209-136-7 / CAS No. 556-67-2
DNEL long-term inhalative (local), Workers: 73 mg/m³
DNEL long-term inhalative (systemic), Workers: 73 mg/m³
DNEL long-term oral (repeated), Consumer: 3,7 mg/kg
DNEL long-term inhalative (local), Consumer: 13 mg/m³
DNEL long-term inhalative (systemic), Consumer: 13 mg/m³

Xylene
Index No. 601-022-00-9 / EC No. 215-535-7 / CAS No. 1330-20-7
DNEL long-term dermal (systemic), Workers: 212 mg/kg
DNEL acute inhalative (local), Workers: 442 mg/m³
DNEL acute inhalative (systemic), Workers: 442 mg/m³
DNEL long-term inhalative (local), Workers: 221 mg/m³
DNEL long-term inhalative (systemic), Workers: 221 mg/m³
DNEL long-term oral (repeated), Consumer: 12,5 mg/kg
DNEL long-term dermal (systemic), Consumer: 125 mg/kg
DNEL acute inhalative (local), Consumer: 260 mg/m³
DNEL acute inhalative (systemic), Consumer: 260 mg/m³
DNEL long-term inhalative (local), Consumer: 65,3 mg/m³
DNEL long-term inhalative (systemic), Consumer: 65,3 mg/m³

Hydrocarbons, C9, aromatics
EC No. 918-668-5
DNEL long-term dermal (systemic), Workers: 25 mg/kg
DNEL long-term inhalative (systemic), Workers: 150 mg/m³
DNEL long-term oral (repeated), Consumer: 11 mg/kg
DNEL long-term dermal (systemic), Consumer: 11 mg/kg
DNEL long-term inhalative (systemic), Consumer: 32 mg/m³

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics
EC No. 918-481-9
DNEL long-term dermal (systemic), Workers: 300 mg/kg
DNEL long-term oral (repeated), Consumer: 300 mg/kg
DNEL long-term dermal (systemic), Consumer: 300 mg/kg
DNEL long-term inhalative (systemic), Consumer: 900 mg/m³

PNEC:

Ethylbenzene
Index No. 601-023-00-4 / EC No. 202-849-4 / CAS No. 100-41-4
PNEC aquatic, freshwater: 0,1 mg/L
PNEC aquatic, marine water: 0,01 mg/L
PNEC aquatic, intermittent release: 0,1 mg/L
PNEC sediment, freshwater: 13,7 mg/kg
PNEC sediment, marine water: 1,37 mg/kg
PNEC, soil: 2,68 mg/kg
PNEC sewage treatment plant (STP): 9,6 mg/L
PNEC Secondary Poisoning: 20 mg/kg

n-butyl acetate
Index No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4
PNEC aquatic, freshwater: 0,18 mg/L
PNEC aquatic, marine water: 0,018 mg/L
PNEC aquatic, intermittent release: 0,36 mg/L

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PNEC sediment, freshwater: 0,981 mg/kg
PNEC sediment, marine water: 0,0981 mg/kg
PNEC, soil: 0,093 mg/kg
PNEC sewage treatment plant (STP): 35,6 mg/L

Aluminium powder (stabilised)
Index No. 013-002-00-1 / EC No. 231-072-3 / CAS No. 7429-90-5
PNEC aquatic, freshwater: 0,0749 mg/L
PNEC sewage treatment plant (STP): 20 mg/L

octamethylcyclotetrasiloxane
Index No. 014-018-00-1 / EC No. 209-136-7 / CAS No. 556-67-2
PNEC aquatic, freshwater: $4,4 \times 10^{-4}$ mg/L
PNEC aquatic, marine water: $4,4 \times 10^{-5}$ mg/L
PNEC sediment, freshwater: 1,5 mg/kg
PNEC sediment, marine water: 0,15 mg/kg
PNEC, soil: 0,13 mg/kg
PNEC sewage treatment plant (STP): > 10 mg/L
PNEC Secondary Poisoning: 41 mg/kg

Xylene
Index No. 601-022-00-9 / EC No. 215-535-7 / CAS No. 1330-20-7
PNEC aquatic, freshwater: 0,327 mg/L
PNEC aquatic, marine water: 0,327 mg/L
PNEC aquatic, intermittent release: 0,327 mg/L
PNEC sediment, freshwater: 12,46 mg/kg
PNEC sediment, marine water: 12,46 mg/kg
PNEC, soil: 2,31 mg/kg
PNEC sewage treatment plant (STP): 6,58 mg/L

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Personal protection equipment

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Use only respiratory protection equipment with CE-symbol including four digit test number. Observe the wear time limits as specified by the manufacturer. Recommended respiratory protection articles: Inadequately ventilated workplaces and spraying procedures are necessary. Fresh air mask or short-time work combination filter A2-P2 are recommended.

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time: > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Wear closely fitting protective glasses in case of splashes.

Body protection

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:

Liquid

Colour:

refer to label

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Odour:	characteristic
Odour threshold:	No data available
Melting point/freezing point:	-90 °C Source: n-butyl acetate
Initial boiling point and boiling range:	80 °C Source: Benzene
Flammability:	Flammable liquid and vapour.
Lower and upper explosion limit:	
Lower explosion limit:	0,6 Vol-% Method: literature value Source: Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics
Upper explosion limit:	7,5 Vol-% Method: literature value Source: n-butyl acetate
Flash point:	24 °C Method: EN ISO 1523
Auto-ignition temperature:	231 °C Source: Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics
Decomposition temperature:	No data available
pH at 20 °C:	No data available
Cinematic viscosity (40°C):	< 20,5 mm²/s
Viscosity at 20 °C:	31 s 3 mm Method: EN ISO 2431
Solubility(ies):	
Water solubility at 20 °C:	insoluble
Partition coefficient: n-octanol/water:	see section 12
Vapour pressure at 20 °C:	14 mbar Source: Xylene
Density and/or relative density:	
Density at 20 °C:	0,93 g/cm³ Method: DIN 53217
Relative vapour density:	No data available
particle characteristics:	not applicable
9.2. Other information	
Solid content:	25 weight-%
solvent content:	
Organic solvents:	75 weight-%
Water:	0 weight-%

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Hazardous decomposition byproducts may form with exposure to high temperatures.

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10.5. Incompatible materials

not applicable

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Ethylbenzene

oral, LD50, Rat: 3500 mg/kg
dermal, LD50, Rabbit: 5000 mg/kg
inhalative (vapours), LC50, Rat: 17,2 mg/L (4 h)

n-butyl acetate

oral, LD50, Rat: 10760 mg/kg
Method: OECD 423
dermal, LD50, Rabbit: 14112 mg/kg
Method: OECD 402
inhalative (vapours), LC50, Rat: > 21 mg/L (4 h)
Method: OECD 403

Aluminium powder (stabilised)

inhalative (dust and mist), LC50, Rat: > 5 mg/L (4 h)

octamethylcyclotetrasiloxane

oral, LD50, Rat: > 4800 mg/kg
dermal, LD50, Rabbit: > 2375 mg/kg
inhalative (dust and mist), LC50, Rat: 36 mg/L (4 h)
Method: OECD 403

Xylene

oral, LD50, Rat: 3523 mg/kg
dermal, LD50, Rabbit: 4200 mg/kg
inhalative (vapours), LC50, Rat: 10 - 20 mg/L (4 h)

Hydrocarbons, C9, aromatics

oral, LD50, Rat: 2000 - 5000 mg/kg
Method: OECD 401
dermal, LD50, Rabbit: > 2000 mg/kg
Method: OECD 402
inhalative (vapours), LC50, Rat: > 10,2 mg/L (4 h)

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics

oral, LD50, Rat: > 5000 mg/kg
Method: OECD 401
dermal, LD50, Rabbit: > 5000 mg/kg
Method: OECD 402
inhalative (vapours), LC50, Rat: > 4951 mg/L (4 h)
Method: OECD 403

Skin corrosion/irritation; Serious eye damage/eye irritation

n-butyl acetate

Skin (4 h)
Method: OECD 404
slightly irritant
eyes, Rabbit
Method: OECD 405
slightly irritant

Xylene

Skin
Irritant — skin irritation and eye damage
eyes
mildly irritating

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Hydrocarbons, C9, aromatics
eyes, Rabbit (24 h)
mild irritant.

Respiratory or skin sensitisation

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

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

STOT-single exposure; STOT-repeated exposure

May cause respiratory irritation.

May cause drowsiness or dizziness.

n-butyl acetate

Specific target organ toxicity (single exposure), drowsiness

Xylene

Specific target organ toxicity (single exposure), Irritation

Irritation to respiratory tract

Hydrocarbons, C9, aromatics

Specific target organ toxicity (single exposure), Irritation

Irritation to respiratory tract

Specific target organ toxicity (single exposure), drowsiness

Narcotic effects

Aspiration hazard

May be fatal if swallowed and enters airways.

Ethylbenzene

Aspiration hazard

Xylene

Aspiration hazard

Hydrocarbons, C9, aromatics

Aspiration hazard

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics

Aspiration hazard

Practical experience/human evidence

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Remark

There is no information available on the preparation itself .

11.2. **Information on other hazards**

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

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

There is no information available on the preparation itself .

Do not allow to enter into surface water or drains.

12.1. **Toxicity**

Ethylbenzene

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 4,2 mg/L (96 h)

Method: OECD 203

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Daphnia toxicity, EC50, Daphnia magna 1,8 - 2,4 mg/L (48 h)
Algae toxicity, IC50:, Selenastrum capricornutum: 4,6 mg/L (72 h)

n-butyl acetate

Fish toxicity, LC50, Pimephales promelas: 18 mg/L (96 h)
Method: OECD 203
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 44 mg/L (48 h)
Method: OECD 202
Algae toxicity, ErC50, Desmodesmus subspicatus: 397 mg/L (72 h)
Method: OECD 201
Cell proliferation inhibition test
Bacteria toxicity, EC50: 356 mg/L (40 h)

octamethylcyclotetrasiloxane

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): > 0,022 mg/L (96 h)
Daphnia toxicity, EC50, Daphnia magna (Big water flea): > 0,015 mg/L (48 h)
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: > 0,022 mg/L (72 h)

Xylene

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 2,6 mg/L (96 h)
Method: OECD 203
Algae toxicity, EC50, Pseudokirchneriella subcapitata: 4,36 mg/L (73 h)
Method: OECD 201
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 1 mg/L (24 h)
Method: OECD 202

Hydrocarbons, C9, aromatics

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 9,2 mg/L (96 h)
Method: OECD 203
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 3,2 mg/L (48 h)
Method: OECD 202
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 2,629 mg/L (72 h)
Method: OECD 201

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): > 1000 mg/L (96 h)
Method: OECD 203
Daphnia toxicity, EC50, Daphnia magna: > 1000 mg/L (48 h)
Method: OECD 202
Algae toxicity, EC50, Pseudokirchneriella subcapitata: > 1000 mg/L
Method: OECD 201

Long-term Ecotoxicity

Harmful to aquatic life with long lasting effects.

n-butyl acetate

Daphnia toxicity, NOEC, Daphnia magna: 23 mg/L (21 d)
Method: OECD 211
Algae toxicity, NOEC, Pseudokirchneriella subcapitata: 105 mg/L (72 h)

octamethylcyclotetrasiloxane

Fish toxicity, NOEC, Oncorhynchus mykiss (Rainbow trout): \geq 0,0044 mg/L (93 d)
Daphnia toxicity, NOEC, Daphnia magna (Big water flea): \geq 0,0079 mg/L (21 d)
Algae toxicity, NOEC, Pseudokirchneriella subcapitata: < 0,022 mg/L (96 h)

Xylene

Fish toxicity, NOEC, Oncorhynchus mykiss (Rainbow trout): > 1,3 mg/L (56 d)
Daphnia toxicity, NOEC, Daphnia sp.: 0,96 mg/L (7 d)
Algae toxicity, NOEC, Pseudokirchneriella subcapitata: 0,44 mg/L (72 h)
Method: OECD 201
Bacteria toxicity, NOEC, Activated sludge: 157 mg/L (3 h)
Method: OECD 209

12.2. Persistence and degradability

Ethylbenzene

Biodegradation: 100 % (6 d); Evaluation Readily biodegradable (according to OECD criteria)
Method: OECD 301E

n-butyl acetate

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Biodegradation: 83 % (28 d); Evaluation Readily biodegradable (according to OECD criteria)
Method: OECD 301D/ EEC 92/69/V, C.4-E

octamethylcyclotetrasiloxane

Biodegradation: 3,7 % (28 d)
Method: OECD 310

Not readily biodegradable (according to OECD criteria)

Xylene

Biodegradation: 87,8 % (28 d); Evaluation Readily biodegradable (according to OECD criteria)
Method: OECD 301F

Hydrocarbons, C9, aromatics

Biodegradation, Degree of elimination:: 89 % (28 d); Evaluation Readily biodegradable (according to OECD criteria)
Method: OECD 301F

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics

Biodegradation: 80 % (28 d); Evaluation Readily biodegradable (according to OECD criteria)
Method: OECD 301F

12.3. Bioaccumulative potential

Ethylbenzene

Partition coefficient: n-octanol/water: 3,2

n-butyl acetate

Partition coefficient n-octanol /water (log P O/W):: 2,3
Method: OECD 117

octamethylcyclotetrasiloxane

Partition coefficient n-octanol /water (log P O/W):: 6,49
Method: OECD 123

Xylene

Partition coefficient: n-octanol/water: 2,77 - 3,15

Hydrocarbons, C9, aromatics

Partition coefficient n-octanol /water (log P O/W):: 3,7 - 4,5

Bioconcentration factor (BCF)

Ethylbenzene

Bioconcentration factor (BCF): 1

n-butyl acetate

Bioconcentration factor (BCF): 15,3

octamethylcyclotetrasiloxane

Bioconcentration factor (BCF), Pimephales promelas (fathead minnow): 12400

Xylene

Bioconcentration factor (BCF), Oncorhynchus mykiss (Rainbow trout): 25,9

12.4. Mobility in soil

n-butyl acetate

Surface tension:: 61,3 mN/m
Method: OECD 115

12.5. Results of PBT and vPvB assessment

The mixture contains the following substances fulfilling the PBT-/vPvB criteria according to REACH Annex XIII:

EC No. CAS No.	Designation	Remark
209-136-7 556-67-2	octamethylcyclotetrasiloxane	PBT- and/or vPvB-substance

12.6. Endocrine disrupting properties

No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Dispose of waste according to applicable legislation.

List of proposed waste codes/waste designations in accordance with EWC

080111* Waste paint and varnish containing organic solvents or other dangerous substances

*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. UN number or ID number

UN 1263

14.2. UN proper shipping name

Land transport (ADR/RID): Paint
Sea transport (IMDG): PAINT
Air transport (ICAO-TI / IATA-DGR): Paint

14.3. Transport hazard class(es)

3

14.4. Packing group

III

14.5. Environmental hazards

Land transport (ADR/RID) No data available
Marine pollutant No data available

14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

Tunnel restriction code D/E

Sea transport (IMDG)

EmS-No. F-E, S-E

14.7. Maritime transport in bulk according to IMO instruments

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

EU legislation

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]

Category: P5c FLAMMABLE LIQUIDS

Quantity 1: 5000 t / Quantity 2: 50000 t

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

15.2. Chemical Safety Assessment

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

EC No.	Designation	REACH No.
CAS No.		

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918-481-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics	01-2119457273-39
918-668-5	Hydrocarbons, C9, aromatics	01-2119455851-35
231-072-3	Aluminium powder (stabilised)	01-2119529243-45
7429-90-5		
204-658-1	n-butyl acetate	01-2119485493-29
123-86-4		
215-535-7	Xylene	01-2119488216-32
1330-20-7		
202-849-4	Ethylbenzene	01-2119489370-35
100-41-4		
209-136-7	octamethylcyclotetrasiloxane	01-2119529238-36
556-67-2		

SECTION 16: Other information

Full text of classification in section 3:

Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
STOT SE 3 / H335	STOT-single exposure	May cause respiratory irritation.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.
STOT SE 3 / H336	STOT-single exposure	May cause drowsiness or dizziness.
Flam. Sol. 1 / H228	flammable solids	Flammable solid.
Acute Tox. 4 / H312		Harmful in contact with skin.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT RE 2 / H373	STOT-repeated exposure	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.
Flam. Liq. 2 / H225	Flammable liquids	Highly flammable liquid and vapour.
Repr. 2 / H361f	Reproductive toxicity	Suspected of damaging fertility.
Aquatic Chronic 1 / H410	Hazardous to the aquatic environment	Very toxic to aquatic life with long lasting effects.

Classification procedure

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Flam. Liq. 3	Flammable liquids	On basis of test data.
STOT SE 3	STOT-single exposure	Calculation method.
STOT SE 3	STOT-single exposure	Calculation method.
Asp. Tox. 1	Aspiration hazard	Calculation method.
Aquatic Chronic 3	Hazardous to the aquatic environment	Calculation method.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air

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IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

Data sources

Data arise from reference works and literature.

Further information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.