Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

1.1. Product identifier

Article No. (manufacturer/supplier)	PS220004FK10
Trade name/designation	SolvSeal Uno Siegel MV 1 : 1 halbmatt Stat.Warennummer: 3208.10.900 UFI: QNE2-20V4-R00V-MFKT

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

Relevant identified uses
paint and/or paint related material

Uses advised against
Do not use for injecting or spraying.
Product is not intended for consumer use.

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

Berger-Seidle GmbH
Parkettlacke - Klebstoffe - Bauchemie
Maybachstraße 2
67269 Grünstadt
Germany

Telephone: +49 6359 / 8005-0
Telefax: +49 6359 / 8005-170

Department responsible for information:
Laboratory
E-mail: Sicherheitsdaten@berger-seidle.de

1.4. Emergency telephone number

24-hour emergency number in side USA: +1 872 5888271 or +11 49 700 24112112 (BLG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 2 / H225	Flammable liquids	Highly flammable liquid and vapour.
STOT SE 3 / H336	STOT-single exposure	May cause drowsiness or dizziness.

2.2. Label elements

GHS-US labeling

Hazard pictograms

Danger

Hazard statements

H225	Highly flammable liquid and vapour.
H336	May cause drowsiness or dizziness.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P261	Avoid breathing vapours.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves and eye/face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P370 + P378	In case of fire: Use extinguishing powder or sand to extinguish.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Keep locked up.

P501 Dispose of contents/container to industrial incineration plant.

Hazard components for labelling

2.3. **Other hazards**

No information available.

Other information

If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use.

SECTION 3: Composition/information on ingredients

3.2. **Mixtures**

Description Polyurethane sealants, high in solvents, containing aromatics

Hazardous ingredients

GHS-US classification

CAS No.	Designation // Remark	weight-%
123-86-4	n-butyl acetate	25 - 50
110-19-0	isobutyl acetate	5 - 7,5
67-64-1	Acetone	1 - 2,5
763-69-9	Ethyl 3-ethoxypropionate	1 - 2,5
64742-95-6	Solvent naphtha (petroleum), light arom.	1 - 2,5
162627-17-0	Condensation products of dimerised fatty acids, C18-unsaturated, with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine	0,5 - 1
85-44-9	phthalic anhydride	0,1 - 0,25
85711-46-2	Fatty acids, C14-18 and C16-18-unsatd., maleated	0,1 - 0,25

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

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.Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

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. 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 empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRGS 727)".

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 15 °C and 25 °C. Protect from heat and direct sunlight.
Due to the content of organic solvents in the preparation:
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

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

ACGIH, TWA: 50 ppm
ACGIH, STEL: 150 ppm

IDLH, TWA: 1700 ppm

NIOSH, TWA: 710 mg/m3; 150 ppm
NIOSH, STEL: 950 mg/m3; 200 ppm

OSHA, TWA: 710 mg/m3; 150 ppm

isobutyl acetate
Index No. 607-026-00-7 / EC No. 203-745-1 / CAS No. 110-19-0

ACGIH, TWA: 50 ppm
ACGIH, STEL: 150 ppm

IDLH, TWA: 1300 ppm [10% LEL]

NIOSH, TWA: 700 mg/m3; 150 ppm

OSHA, TWA: 700 mg/m3; 150 ppm

Acetone
Index No. 606-001-00-8 / EC No. 200-662-2 / CAS No. 67-64-1

IDLH, TWA: 2500 ppm

OSHA, TWA: 2400 mg/m3; 1000 ppm

NIOSH, TWA: 590 mg/m3; 250 ppm

ACGIH, TWA: 250 ppm
ACGIH, STEL: 500 ppm

ACGIH-BEI, TWA: 25 mg/L
Remark: acetone; urine; end of exposure or end of shift

phthalic anhydride
Index No. 607-009-00-4 / EC No. 201-607-5 / CAS No. 85-44-9

IDLH, TWA: 60 mg/m3

OSHA, TWA: 12 mg/m3; 2 ppm

NIOSH, TWA: 6 mg/m3; 1 ppm

ACGIH, TWA: 0,002 mg/m3
ACGIH, STEL: 0,005 mg/m3
Remark: (may be absorbed through the skin)

Additional information

TWA : Long-term occupational exposure limit value
STEL : short-term occupational exposure limit value
C : peak limitation

DNEL:

Acetone
Index No. 606-001-00-8 / EC No. 200-662-2 / CAS No. 67-64-1
DNEL long-term dermal (systemic), Workers: 186 mg/kg
DNEL acute inhalative (systemic), Workers: 1210 mg/m³
DNEL long-term inhalative (local), Workers: 2420 mg/m³
DNEL long-term inhalative (systemic), Workers: 1210 mg/m³
DNEL long-term dermal (systemic), Consumer: 62 mg/kg
DNEL long-term inhalative (systemic), Consumer: 200 mg/m³
DNEL long-term exposure oral (systemic effects), Consumer: 62 mg/kg

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: 7 mg/kg

DNEL acute inhalative (local), Workers: 600 mg/m³
DNEL long-term inhalative (local), Workers: 300 mg/m³
DNEL long-term inhalative (systemic), Workers: 48
DNEL acute dermal, short-term (systemic), Consumer: 6 mg/kg
DNEL long-term dermal (systemic), Consumer: 6 mg/kg
DNEL acute inhalative (local), Consumer: 300 mg/m³
DNEL long-term inhalative (local), Consumer: 35,7 mg/m³
DNEL long-term inhalative (systemic), Consumer: 12
DNEL long-term exposure oral (systemic effects), Consumer: 2 mg/kg

Ethyl 3-ethoxypropionate
EC No. 212-112-9 / CAS No. 763-69-9
DNEL long-term dermal (local), Workers: 102 mg/kg
DNEL long-term dermal (systemic), Workers: 102 mg/kg
DNEL acute inhalative (local), Workers:
DNEL acute inhalative (systemic), Workers:
DNEL long-term inhalative (local), Workers: 610 mg/kg
DNEL long-term inhalative (systemic), Workers: 610 mg/kg
DNEL long-term dermal (local), Consumer: 24,2 mg/kg
DNEL long-term dermal (systemic), Consumer: 24,2 mg/kg
DNEL long-term inhalative (local), Consumer:
DNEL long-term inhalative (systemic), Consumer: 72,6 mg/kg
DNEL long-term exposure oral (systemic effects), Consumer: 1,2 mg/kg

Solvent naphtha (petroleum), light arom.
Index No. 649-356-00-4 / EC No. 265-199-0 / CAS No. 64742-95-6
DNEL long-term dermal (systemic), Workers: 25 mg/kg
DNEL long-term inhalative (systemic), Workers: 150 mg/m³
DNEL long-term dermal (systemic), Consumer: 11 mg/kg
DNEL long-term inhalative (systemic), Consumer: 32 mg/m³
DNEL long-term exposure oral (systemic effects), Consumer: 11 mg/kg

isobutyl acetate
Index No. 607-026-00-7 / EC No. 203-745-1 / CAS No. 110-19-0
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 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

PNEC:

Acetone
Index No. 606-001-00-8 / EC No. 200-662-2 / CAS No. 67-64-1
PNEC aquatic, freshwater: 10,6 mg/L
PNEC aquatic, marine water: 1,06 mg/L
PNEC aquatic, intermittent release: 21 mg/L
PNEC sediment, freshwater: 30,4 mg/kg
PNEC sediment, marine water: 3,04 mg/kg
PNEC sewage treatment plant (STP): 100 mg/L
PNEC soil: 29,5 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
PNEC sediment, freshwater: 0,981 mg/L
PNEC sediment, marine water: 0,0981 mg/L
PNEC, soil: 0,0903 mg/kg
PNEC sewage treatment plant (STP): 35,6 mg/L

Ethyl 3-ethoxypropionate
EC No. 212-112-9 / CAS No. 763-69-9

PNEC aquatic, freshwater: 0,0609 mg/L
PNEC aquatic, marine water: 0,006 mg/L
PNEC sediment, freshwater: 0,419 mg/kg
PNEC sewage treatment plant (STP): 50 mg/L
PNEC soil: 0,048 mg/L

isobutyl acetate
Index No. 607-026-00-7 / EC No. 203-745-1 / CAS No. 110-19-0
PNEC aquatic, freshwater: 0,17 mg/L
PNEC aquatic, marine water: 0,017 mg/L
PNEC aquatic, intermittent release: 0,34 mg/L
PNEC sediment, freshwater: 0,877 mg/kg
PNEC sediment, marine water: 0,0877 mg/kg
PNEC, soil: 0,0755 mg/kg
PNEC sewage treatment plant (STP): 200 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. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: Butyl caoutchouc (butyl 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:	**yellow**
Odour:	**characteristic**
Odour threshold:	**not applicable**
Initial boiling point and boiling range:	**56 °C** Source: Acetone
Lower and upper explosion limit:	
Lower explosion limit:	**1,25 Vol-%**
Upper explosion limit:	**14,3 Vol-%** Source: Acetone
Flash point:	**18 °C**
Auto-ignition temperature:	**200 °C** Source: Solvent naphtha (petroleum), light arom.
Decomposition temperature:	**not applicable**

pH at 20 °C:	**not applicable**
Cinematic viscosity (40°C):	**< 400 mm²/s**
Viscosity at 20 °C:	**70 s 4 mm** Method: DIN 53211
Solubility(ies):	
Water solubility at 20 °C:	**insoluble**
Partition coefficient: n-octanol/water:	**see section 12**
Vapour pressure at 20 °C:	**240 mbar** Method: calculated. Source: Acetone
Density and/or relative density:	
Density at 20 °C:	**1,02 g/cm³** Method: ISO 2811, part 3
Relative vapour density:	**not applicable**
particle characteristics:	**not applicable**

9.2. **Other information**

Solvent separation test: **< 3 weight-% (ADR/RID)**

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**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

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

Acetone
oral, LD50, Rat: 5800 mg/kg
Method: OECD 401
dermal, LD50, Rat: > 15800 mg/kg
inhalative (vapours), LC50, Rat: 76 mg/L (4 h)

n-butyl acetate
oral, LD50, Rat: 10760 mg/kg
dermal, LD50, Rabbit: > 14100 mg/kg

phthalic anhydride
oral, LD50, Rat: 1530 mg/kg
dermal, LD50, Rabbit: 3160 mg/kg
inhalative, Rat: 0,21 mg/L (1 h)

Ethyl 3-ethoxypropionate
oral, LD50, Rat: > 4300 mg/kg

female
dermal, LD50, Rabbit: 4080 mg/kg
male
inhalative, LC50, Rat: > 998 ppm (6 h)
dermal, LD50, Guinea pig: > 19000 mg/kg
oral, LD50, Rat: > 5000 mg/kg
male
dermal, LD50, Rabbit: 4679 mg/kg
female

Solvent naphtha (petroleum), light arom.
dermal, LD50, Rabbit: > 3160 mg/kg
Method: OECD 402

Fatty acids, C14-18 and C16-18-unsatd., maleated
oral, LD50, Rat: > 2000 mg/kg
Method: OECD 423

isobutyl acetate
oral, LD50, Rat: 13413 mg/kg
Method: OECD 401
dermal, LD50, Rabbit: > 17400 mg/kg
Method: OECD 402
inhalative, LC0:, Rat: 23,4 mg/L (4 h)

Skin corrosion/irritation; Serious eye damage/eye irritation

Acetone
eyes
Skin

phthalic anhydride
Skin (4 h)
eyes

Ethyl 3-ethoxypropionate
Skin
Possibility of irritations.; Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).
eyes: Evaluation Possibility of irritations.

isobutyl acetate
Skin (4 h)
eyes

Respiratory or skin sensitisation

Acetone

n-butyl acetate
Skin:
Respiratory system:

phthalic anhydride
Skin:
Respiratory system:

Ethyl 3-ethoxypropionate
: ; Evaluation No sensitising effect known

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Ethyl 3-ethoxypropionate
Germ cell mutagenicity; Evaluation Non-mutagenic
Carcinogenicity; Evaluation not carcinogenic

STOT-single exposure; STOT-repeated exposure

May cause drowsiness or dizziness.

n-butyl acetate
Specific target organ toxicity (single exposure), drowsiness

phthalic anhydride

Specific target organ toxicity (single exposure), Irritation

Ethyl 3-ethoxypropionate
Specific target organ toxicity (single exposure) Evaluation The substance or mixture is not rated as target-organ-toxic

isobutyl acetate
Specific target organ toxicity (single exposure), drowsiness

Aspiration hazard

n-butyl acetate
Aspiration hazard

Solvent naphtha (petroleum), light arom.
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 . The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified according to the toxicological dangers.See chapters 2 and 15 for details.

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]
Do not allow to enter into surface water or drains.

12.1. **Toxicity**

Acetone
Fish toxicity, LC50, Salmo gairdneri : 5540 mg/L (96 h)
Algae toxicity, ErC50: 430 mg/L (96 h)
Daphnia toxicity, Daphnia pulex (water flea): 8800 mg/L (96 h)

n-butyl acetate
Fish toxicity, LC50, Leuciscus idus (golden orfe): 62 mg/L (96 h)
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 72,8 mg/L (24 h)
Algae toxicity, Scenedesmus subspicatus: 674,7 mg/L (72 h)
Fish toxicity, Lepomis macrochirus (Bluegill): 100 mg/L (96 h)
Fish toxicity, LC50, Pimephales promelas (fathead minnow): 18 mg/L (96 h)

Ethyl 3-ethoxypropionate
Fish toxicity, LC50, Pimephales promelas: 88 mg/L (96 h)
Daphnia toxicity, EC50, Daphnia magna (Big water flea): > 95 mg/L (48 h)
Algae toxicity, ErC50, Selenastrum capricornutum: 114,86 mg/L (72 h)
Inhibition of growth rate.
Fish toxicity, LC50, Pimephales promelas 45,3 - 55,3 mg/L (96 h)
static test
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 873 mg/L (48 h)
static test
Bacteria toxicity, IC50:, bacteria: > 5000 (16 h)

Fatty acids, C14-18 and C16-18-unsatd., maleated
Daphnia toxicity, EC50, Daphnia magna (Big water flea): > 100 mg/L (48 h); Evaluation semistatic
Method: OECD 202
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: > 100 mg/L (72 h); Evaluation semistatic
Method: OECD 201

Fish toxicity, LC50, Leuciscus idus (golden orfe): > 150 mg/L (48 h)
Method: DIN 38412
Bacteria toxicity, EC50, Activated sludge: > 1000 mg/L (3 h); Evaluation static test
Method: OECD 209

isobutyl acetate
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 25 mg/L (48 h)
Method: OECD 202
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 370 mg/L (72 h)
Method: OECD 201
Fish toxicity, LC50, Oryzias latipes (Ricefish): 17 mg/L (96 h)
Method: OECD 203
Algae toxicity, NOEC, Pseudokirchneriella subcapitata: 95 mg/L (72 h)
Method: OECD 201

Long-term Ecotoxicity

Toxicological data are not available.

12.2. **Persistence and degradability**

Acetone
: 91 % (28 d)
Method: OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C

Ethyl 3-ethoxypropionate
: 100 % (18 D)
Method: OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C

isobutyl acetate
: 81 % (20 D); Evaluation Readily biodegradable (according to OECD criteria).
Method: OECD 301D/ EEC 92/69/V, C.4-E

12.3. **Bioaccumulative potential**

Acetone
Partition coefficient: n-octanol/water: -0,23

n-butyl acetate
Partition coefficient: n-octanol/water: 1,81
Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.

phthalic anhydride
Partition coefficient: n-octanol/water: 1,6

Bioconcentration factor (BCF)

Ethyl 3-ethoxypropionate
Bioconcentration factor (BCF): < 100

isobutyl acetate
Bioconcentration factor (BCF): 60
Method: BOD (% of COD).

12.4. **Mobility in soil**

Acetone
Henry's Law Constant: 2,929 Pa* m³/mol

Ethyl 3-ethoxypropionate
: Evaluation mobile in aqueous environment

12.5. **Results of PBT and vPvB assessment**

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

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**

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.

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**

Land transport (ADR/RID):	III
for packages > 450 litres:	II
Sea transport (IMDG):	III
for packages > 450 litres	II
Air transport (ICAO-TI / IATA-DGR):	III
for packages > 30 litres:	II

14.5. **Environmental hazards**

Land transport (ADR/RID)	not applicable
Marine pollutant	not applicable

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	E
for packages > 450 litres:	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**

US Federal regulations

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

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]
VOC-value (in g/L) ISO 11890-2: 538
VOC-value (in g/L) ASTM D2369: 538

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds
VOC product category: (Cat. A/j) ; VOC limit value: 500 g/l
Maximum VOC content of the product in a ready to use condition (in g/L): 499

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).

„This substance is not listed on the Toxic Substances Control Act (TSCA) Chemical Substance Inventory. This substance may only be used for experimental purposes under the TSCA R&D Exemption in accordance with the regulations at 40 CFR 720.36. Commercial use is prohibited."

Substance/product listed in the following inventories:

Not listet in TOXIC SUBSTANCES CONTROL ACT (TSCA)

15.2. **Chemical Safety Assessment**

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Full text of classification in section 3:

Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
STOT SE 3 / H336	STOT-single exposure	May cause drowsiness or dizziness.
Flam. Liq. 2 / H225	Flammable liquids	Highly flammable liquid and vapour.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
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.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Resp. Sens. 1 / H334	Respiratory or skin sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Classification procedure

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

Flam. Liq. 2	Flammable liquids	On basis of test data.
STOT SE 3	STOT-single exposure	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
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

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.