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

1.1 Product identifier

NC-Sprühlack 5092 (SORTE 5092)

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

Solvent-based coating. Intended purpose see technical data sheet.

Relevant identified uses

Product Categories [PC]

PC9 - Coatings and paints, fillers, putties, thinners

Remark

The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

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

Brillux GmbH & Co. KG, Industrielack
www.brillux-industrielack.de

Street : Otto-Hahn-Straße 14

Postal code/city : D-59423 Unna

Telephone : +49 2303 8805-0

Telefax : +49 2303 8805-119

Information contact : E-mail address of the competent person for safety data sheets: sdb@brillux-industrielack.de

1.4 Emergency telephone number

Giftinformationszentrum-Nord (poisons centre), consultation in german and english
Telephone: +49 551 19 24 0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

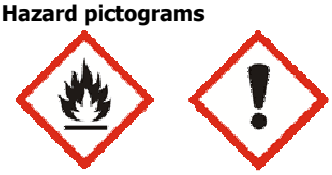
Classification according to Regulation (EC) No 1272/2008 [CLP]

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.
Aerosol 1 ; H222 - Aerosols : Category 1 ; Extremely flammable aerosol.
Aerosol 1 ; H229 - Aerosols : Category 1 ; Pressurised container: May burst if heated.
STOT SE 3 ; H336 - STOT-single exposure : Category 3 ; May cause drowsiness or dizziness.

2.2 Label elements

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

Hazard pictograms



Flame (GHS02) · Exclamation mark (GHS07)

Signal word

Danger

Hazard components for labelling

ACETONE ; CAS No. : 67-64-1
N-BUTYL ACETATE ; CAS No. : 123-86-4

Hazard statements

H222 Extremely flammable aerosol.

H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P312	Call a POISON CENTER or a doctor, if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Supplemental Hazard information (EU)

EUH066	Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

ACETONE ; REACH registration No. : 01-2119471330-49 ; EC No. : 200-662-2; CAS No. : 67-64-1
Weight fraction : ≥ 30 - < 35 %
Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319 STOT SE 3 ; H336

BUTANE ; EC No. : 203-448-7; CAS No. : 106-97-8
Weight fraction : ≥ 10 - < 25 %
Classification 1272/2008 [CLP] : Flam. Gas 1 ; H220 Press. Gas (Liq.) ; H280

N-BUTYL ACETATE ; REACH registration No. : 01-2119485493-29 ; EC No. : 204-658-1; CAS No. : 123-86-4
Weight fraction : ≥ 5 - < 10 %
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 STOT SE 3 ; H336

PROPANE ; EC No. : 200-827-9; CAS No. : 74-98-6
Weight fraction : ≥ 5 - < 10 %
Classification 1272/2008 [CLP] : Flam. Gas 1 ; H220 Press. Gas (Liq.) ; H280

XYLENE ; REACH registration No. : 01-2119488216-32 ; EC No. : 215-535-7; CAS No. : 1330-20-7
Weight fraction : ≥ 5 - < 10 %
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 Asp. Tox. 1 ; H304 STOT RE 2 ; H373 Acute Tox. 4 ; H312 Acute Tox. 4 ; H332 Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

NITRO CELLULOSE ; CAS No. : 9004-70-0
Weight fraction : ≥ 5 - < 10 %
Classification 1272/2008 [CLP] : Flam. Sol. 1 ; H228

ETHANOL ; REACH registration No. : 01-2119457610-43 ; EC No. : 200-578-6; CAS No. : 64-17-5
Weight fraction : ≥ 1 - < 5 %
Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319

4-METHYLPENTAN-2-ONE ; REACH registration No. : 01-2119473980-30 ; EC No. : 203-550-1; CAS No. : 108-10-1
Weight fraction : ≥ 1 - < 5 %
Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Acute Tox. 4 ; H332 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

2-METHOXY-1-METHYLETHYL ACETATE ; REACH registration No. : 01-2119475791-29 ; EC No. : 203-603-9; CAS No. : 108-65-6

Weight fraction :	≥ 1 - < 5 %
Classification 1272/2008 [CLP] :	Flam. Liq. 3 ; H226 Substance with a common (EC) occupational exposure limit value.

Additional information
Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Change contaminated, saturated clothing. When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice.

Following inhalation
Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact
Wash immediately with: Water and soap Do not wash with: Solvents/Thinner

After eye contact
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Protect uninjured eye.

After ingestion
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting. No direct artificial respiration to be given by first aider.

4.2 Most important symptoms and effects, both acute and delayed
No information available.

4.3 Indication of any immediate medical attention and special treatment needed
None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Extinguishing powder, alcohol resistant foam, carbon dioxide (CO_2), water spray.

Unsuitable extinguishing media
Full water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
In case of fire may be liberated: Nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO_2) and pyrolysis products, toxic.

5.3 Advice for firefighters

Special protective equipment for firefighters
Use suitable breathing apparatus.

5.4 Additional information
Burning produces heavy smoke. Use water spray jet to protect personnel and to cool endangered containers. Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Remove all sources of ignition. Provide adequate ventilation. See protective measures under point 7 and 8.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clean with detergents. Avoid solvent cleaners.

6.4 Reference to other sections

None

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

Avoid: Inhalation of vapours or spray/mists Keep away from heat and direct sunlight. Do not spray on naked flames or any incandescent material. Only use the material in places where open light, fire and other flammable sources can be kept away. If handled uncovered, arrangements with local exhaust ventilation should be used if possible. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Only allow access to authorised staff.

Measures to prevent fire

Keep away from sources of ignition - No smoking. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Container is under pressure. Protect against sunshine and heating over 50 °C. After use: do not open violently or burn. Do not spray into flames or on glowing materials. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Take precautionary measures against static discharges. Wear anti-static footwear and clothing Use only antistatically equipped (spark-free) tools.

Advices on general occupational hygiene

Wear personal protection equipment (refer to section 8). When using do not eat, drink, smoke, sniff.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Use explosion-proof machinery, apparatus, ventilation facilities, tools etc. Floors should be impervious, resistant to liquids and easy to clean. Provide adequate ventilation as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Observe official regulations on storing packagings with pressurized containers.

Hints on joint storage

Storage class (TRGS 510) : 2B

Do not store together with

Strong acid, strong alkali, oxidising agent, food and feedingstuffs.

Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place.

Protect against : Heat. Humidity.

7.3 Specific end use(s)

Solvent-based coating. Intended purpose see technical data sheet.

Industrial sector specific solutions

Note DGUV-Rule 100-500, section 2.29 (processing coating materials). Note DGUV-Rule 109-013.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

ACETONE ; CAS No. : 67-64-1

Limit value type (country of origin) :	TRGS 900 (D)
Limit value :	500 ppm / 1200 mg/m^3
Peak limitation :	2(I)

Remark : Y
Version : 29.03.2019
Limit value type (country of origin) : TWA (EC)
Limit value : 500 ppm / 1210 mg/m^3
Version : 31.01.2018

BUTANE ; CAS No. : 106-97-8
Limit value type (country of origin) : TRGS 900 (D)
Limit value : 1000 ppm / 2400 mg/m^3
Peak limitation : 4(II)
Version : 29.03.2019

N-BUTYL ACETATE ; CAS No. : 123-86-4
Limit value type (country of origin) : TRGS 900 (D)
Limit value : 62 ppm / 300 mg/m^3
Peak limitation : 2(I)
Remark : Y
Version : 29.03.2019

PROPANE ; CAS No. : 74-98-6
Limit value type (country of origin) : TRGS 900 (D)
Limit value : 1000 ppm / 1800 mg/m^3
Peak limitation : 4(II)
Version : 29.03.2019

XYLENE ; CAS No. : 1330-20-7
Limit value type (country of origin) : TRGS 900 (D)
Limit value : 100 ppm / 440 mg/m^3
Peak limitation : 2(II)
Remark : H
Version : 01.10.1993
Limit value type (country of origin) : STEL (EC)
Limit value : 100 ppm / 442 mg/m^3
Version :
Limit value type (country of origin) : TWA (EC)
Limit value : 50 ppm / 221 mg/m^3
Version :

ETHANOL ; CAS No. : 64-17-5
Limit value type (country of origin) : TRGS 900 (D)
Limit value : 200 ppm / 380 mg/m^3
Peak limitation : 4(II)
Remark : Y
Version : 29.03.2019

4-METHYLPENTAN-2-ONE ; CAS No. : 108-10-1
Limit value type (country of origin) : TRGS 900 (D)
Limit value : 20 ppm / 83 mg/m^3
Peak limitation : 2(I)
Remark : H,Y
Version : 29.03.2019
Limit value type (country of origin) : STEL (EC)
Limit value : 50 ppm / 208 mg/m^3
Version : 31.01.2018
Limit value type (country of origin) : TWA (EC)
Limit value : 20 ppm / 83 mg/m^3
Version : 31.01.2018

2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6
Limit value type (country of origin) : TRGS 900 (D)
Limit value : 50 ppm / 270 mg/m^3

Peak limitation : 1(I)
Remark : Y
Version : 29.03.2019
Limit value type (country of origin) : STEL (EC)
Limit value : 100 ppm / 550 mg/m^3
Remark : H
Version : 31.01.2018
Limit value type (country of origin) : TWA (EC)
Limit value : 50 ppm / 275 mg/m^3
Remark : H
Version : 31.01.2018

Biological limit values

ACETONE ; CAS No. : 67-64-1
Limit value type (country of origin) : TRGS 903 (D)
Parameter : Acetone / Urine (U) / End of exposure or end of shift
Limit value : 80 mg/l
Version : 29.03.2019

XYLENE ; CAS No. : 1330-20-7
Limit value type (country of origin) : TRGS 903 (D)
Parameter : Xylene / Whole blood (B) / End of exposure or end of shift
Limit value : 1,5 mg/l
Remark : 5/2013 DFG
Version : 01.10.1993
Limit value type (country of origin) : TRGS 903 (D)
Parameter : Methylhippuric acid / Urine (U) / End of exposure or end of shift
Limit value : 2 g/l
Version : 01.10.1993

4-METHYLPENTAN-2-ONE ; CAS No. : 108-10-1
Limit value type (country of origin) : TRGS 903 (D)
Parameter : 4-Methylpentane-2-on / Urine (U) / End of exposure or end of shift
Limit value : 0,7 mg/l
Version : 29.03.2019

DNEL/DMEL and PNEC values

DNEL/DMEL

Limit value type : DNEL/DMEL (Consumer) (ACETONE ; CAS No. : 67-64-1)
Exposure route : Oral
Exposure frequency : Long-term
Limit value : 62 mg/kg
Limit value type : DNEL/DMEL (Consumer) (ACETONE ; CAS No. : 67-64-1)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 62 mg/kg
Limit value type : DNEL/DMEL (Consumer) (ACETONE ; CAS No. : 67-64-1)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 200 mg/m^3
Limit value type : DNEL/DMEL (Industrial) (ACETONE ; CAS No. : 67-64-1)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 186 mg/kg
Limit value type : DNEL/DMEL (Industrial) (ACETONE ; CAS No. : 67-64-1)
Exposure route : Inhalation
Exposure frequency : Short-term (acute)
Limit value : 2420 mg/m^3
Limit value type : DNEL/DMEL (Industrial) (ACETONE ; CAS No. : 67-64-1)

Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	1210 mg/m^3
Limit value type :	DNEL Consumer (systemic) (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	102,34 mg/m^3
Limit value type :	DNEL/DMEL (Industrial) (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	96 mg/kg
Limit value type :	DNEL/DMEL (Industrial) (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	48 mg/m^3
Limit value type :	DNEL/DMEL (Industrial) (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	7 mg/kg
Limit value type :	DNEL/DMEL (Industrial) (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	480 mg/m^3
Limit value type :	DNEL/DMEL (Industrial) (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	289 mg/kg
Limit value type :	DNEL/DMEL (Industrial) (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	180 mg/kg
Limit value type :	DNEL/DMEL (Industrial) (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	77 mg/kg
Limit value type :	DNEL Consumer (local) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Dermal
Exposure frequency :	Short-term
Limit value :	950 mg/kg
Safety factor :	1 Days
Limit value type :	DNEL Consumer (local) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Inhalation
Exposure frequency :	Short-term
Limit value :	950 mg/m^3
Limit value type :	DNEL/DMEL (Consumer) (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	54,8 mg/kg
Limit value type :	DNEL/DMEL (Consumer) (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	33 mg/m^3
Limit value type :	DNEL/DMEL (Consumer) (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Oral

Exposure frequency :	Long-term (repeated)
Limit value :	1,67 mg/kg
Limit value type :	DNEL Consumer (systemic) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Oral
Exposure frequency :	Long-term
Limit value :	87 mg/kg
Safety factor :	1 Days
Limit value type :	DNEL Consumer (systemic) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	206 mg/kg
Safety factor :	1 Days
Limit value type :	DNEL Consumer (systemic) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	114 mg/m^3
Limit value type :	DNEL/DMEL (Industrial) (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	275 mg/m^3
Limit value type :	DNEL/DMEL (Industrial) (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	153,5 mg/kg
Limit value type :	DNEL worker (local) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Inhalation
Exposure frequency :	Short-term
Limit value :	1900 mg/m^3
Limit value type :	DNEL worker (systemic) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	343 mg/kg
Safety factor :	1 Days
Limit value type :	DNEL worker (systemic) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	950 mg/m^3

PNEC

Limit value type :	PNEC (Aquatic, freshwater) (ACETONE ; CAS No. : 67-64-1)
Exposure route :	Water (Including sewage plant)
Limit value :	10,6 mg/l
Limit value type :	PNEC (Aquatic, intermittent release) (ACETONE ; CAS No. : 67-64-1)
Exposure route :	Water (Including sewage plant)
Limit value :	21 mg/l
Limit value type :	PNEC (Aquatic, marine water) (ACETONE ; CAS No. : 67-64-1)
Exposure route :	Water (Including sewage plant)
Limit value :	1,06 mg/l
Limit value type :	PNEC (Sediment, freshwater) (ACETONE ; CAS No. : 67-64-1)
Exposure route :	Soil
Limit value :	30,4 mg/kg
Limit value type :	PNEC (Sediment, marine water) (ACETONE ; CAS No. : 67-64-1)
Exposure route :	Soil
Limit value :	3,04 mg/kg
Limit value type :	PNEC soil (ACETONE ; CAS No. : 67-64-1)

Exposure route :	Soil
Limit value :	0,112 mg/kg
Limit value type :	PNEC (Sewage treatment plant) (ACETONE ; CAS No. : 67-64-1)
Exposure route :	Water (Including sewage plant)
Limit value :	29,5 mg/l
Limit value type :	PNEC (Aquatic, freshwater) (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Water (Including sewage plant)
Limit value :	0,18 mg/l
Limit value type :	PNEC (Aquatic, intermittent release) (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Water (Including sewage plant)
Limit value :	0,36 mg/l
Limit value type :	PNEC (Aquatic, marine water) (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Water (Including sewage plant)
Limit value :	0,018 mg/l
Limit value type :	PNEC (Sediment, freshwater) (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Soil
Limit value :	0,981 mg/kg
Limit value type :	PNEC (Sediment, marine water) (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Soil
Limit value :	0,0981 mg/kg
Limit value type :	PNEC soil (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Soil
Limit value :	0,0903 mg/kg
Limit value type :	PNEC (Sewage treatment plant) (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Water (Including sewage plant)
Limit value :	35,6 mg/l
Limit value type :	PNEC (Aquatic, freshwater) (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Water (Including sewage plant)
Limit value :	0,327 mg/l
Limit value type :	PNEC (Sediment, freshwater) (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Water (Including sewage plant)
Limit value :	12,46 mg/kg
Limit value type :	PNEC soil (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Soil
Limit value :	2,31 mg/kg
Limit value type :	PNEC (Sewage treatment plant) (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Water (Including sewage plant)
Limit value :	6,58 mg/l
Limit value type :	PNEC (Aquatic, freshwater) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Water (Including sewage plant)
Limit value :	0,96 mg/l
Limit value type :	PNEC (Aquatic, freshwater) (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Water (Including sewage plant)
Limit value :	0,635 mg/l
Limit value type :	PNEC (Aquatic, intermittent release) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Water (Including sewage plant)
Limit value :	2,75 mg/l
Limit value type :	PNEC (Aquatic, marine water) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Water (Including sewage plant)
Limit value :	0,79 mg/l
Limit value type :	PNEC (Aquatic, marine water) (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Water (Including sewage plant)
Limit value :	0,0635 mg/l
Limit value type :	PNEC (Sediment, freshwater) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Soil

Limit value :	3,6 mg/kg
Limit value type :	PNEC (Sediment, freshwater) (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Soil
Limit value :	3,29 mg/kg
Limit value type :	PNEC (Sediment, marine water) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Soil
Limit value :	2,9 mg/kg
Safety factor :	1 Days
Limit value type :	PNEC (Sediment, marine water) (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Soil
Limit value :	0,329 mg/kg
Limit value type :	PNEC soil (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Soil
Limit value :	29 mg/kg
Limit value type :	PNEC soil (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Soil
Limit value :	0,63 mg/l
Limit value type :	PNEC (Sewage treatment plant) (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Water (Including sewage plant)
Limit value :	100 mg/l
Limit value type :	PNEC (Sewage treatment plant) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Water (Including sewage plant)
Limit value :	580 mg/l

8.2 Exposure controls

Personal protection equipment

Eye/face protection

Suitable eye protection

goggles

Recommended eye protection articles

DIN EN 166

Remark

Note DGUV-Rule 112-192.

Skin protection

Hand protection

Use safety gloves according to EN 374. Suitable glove materials: fluoro-rubber, butyl-rubber or nitrile-rubber. Please pay attention to the glove penetration times of the substances named below in chapter 2, according to the glove manufactures.

Remark : After washing hands replace lost skin fat by fat containing skin creams. Note DGUV-Rule 112-195. Note TRGS 401.

Body protection

Required properties : Antistatic, non-melting.

Recommended material : Natural fibres (e.g. cotton), heat-resistant synthetic fibres.

Remark : Note DGUV-Rule 112-189. Note TRGS 401.

Respiratory protection

Respiratory protection necessary at: Insufficient ventilation, insufficient exhaust or spray application.

Suitable respiratory protection apparatus

Combination filter mask A1-P2 for short-term work.
European Committee for Standardization (CEN) standards EN 136, 140 and 405 provide respirator masks and EN 149 and 143 provide filter recommendations.

Remark

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Note TRGS 402.

Occupational exposure controls

Technical measures to prevent exposure

Technical measures and the application of suitable work processes have priority over personal protection equipment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Aerosol

Colour : According to product identification.

Odour

Like solvent.

Safety relevant basis data

Melting point/melting range :			not applicable		
Initial boiling point and boiling range :	(1013 hPa)		-44	°C	
Decomposition temperature :			No data available		
Flammpunkt:			-4	°C	(Without propellant)
Ignition temperature :			365	°C	
Lower explosion limit :			1,5	Vol-%	
Upper explosion limit :			13	Vol-%	
Vapour pressure:	(20 °C)		3600	hPa	
Density :	(20 °C)		0,7 - 0,8	g/cm³	
Water solubility :	(20 °C)		Not or little soluble		
pH :			No data available		
log P O/W :			No data available		
Viscosity :	(23 °C)		No data available		
Cinematic viscosity :	(40 °C)	>	20,5	mm²/s	
Solid content :		approx.	17	Wt %	
Solvent content :			65 - 70	Wt %	
Odour threshold :			not relevant		
Relative vapour density :	(20 °C)		No data available		
Vapourisation rate :			No data available		
Maximum VOC content (EC) :			83	Wt %	
Flammable aerosols :	Extremely flammable aerosol.				
Oxidising liquids :	Not oxidising.				

9.2 Other information

The physical specifications are approximate values and refer to the used safety relevant component(s).

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Exothermic reaction with: Alkali (lye), concentrated. Acid, concentrated. Oxidizing agent.

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity

Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	not relevant
Parameter :	LD50 (ACETONE ; CAS No. : 67-64-1)
Exposure route :	Oral
Species :	Rat
Effective dose :	9750 mg/kg
Parameter :	LD50 (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Oral
Species :	Rat
Effective dose :	10760 mg/kg
Parameter :	LD50 (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Oral
Species :	Rat
Effective dose :	8700 mg/kg
Parameter :	LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Oral
Species :	Rat
Effective dose :	10470 mg/kg
Parameter :	LD50 (4-METHYLPENTAN-2-ONE ; CAS No. : 108-10-1)
Exposure route :	Oral
Species :	Rat
Effective dose :	2080 mg/kg
Parameter :	LD50 (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Oral
Species :	Rat
Effective dose :	8500 mg/kg
Parameter :	LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Oral
Species :	Rabbit
Effective dose :	6300 mg/kg

Acute dermal toxicity

Parameter :	ATEmix calculated
Exposure route :	Dermal
Effective dose :	18333 mg/kg
Parameter :	LD50 (ACETONE ; CAS No. : 67-64-1)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	20 g/kg
Parameter :	LD50 (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	> 14000 mg/kg
Parameter :	LD50 (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	> 2000 mg/kg
Parameter :	LD50 (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)

Exposure route :	Dermal
Species :	Rat
Effective dose :	> 5000 mg/kg
Parameter :	LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	> 2000 mg/kg

Acute inhalation toxicity

Parameter :	ATEmix calculated
Exposure route :	Inhalation (dust/mist)
Effective dose :	16,67 mg/l
Parameter :	LC50 (BUTANE ; CAS No. : 106-97-8)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	659 g/m^3
Parameter :	LC50 (BUTANE ; CAS No. : 106-97-8)
Exposure route :	Inhalation
Species :	Mouse
Effective dose :	680 g/m^3
Parameter :	LC50 (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	23,4 mg/kg
Exposure time :	4 h
Parameter :	LC50 (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	6350 mg/l
Parameter :	LC50 (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	35,7 mg/l
Parameter :	LC50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Inhalation
Species :	Mouse
Effective dose :	> 20 mg/l
Exposure time :	4 h
Parameter :	LC50 (4-METHYLPENTAN-2-ONE ; CAS No. : 108-10-1)
Exposure route :	Inhalation
Species :	Mouse
Effective dose :	23,29 g/m^3

Assessment/classification

Vapours may cause drowsiness and dizziness.

Irritant and corrosive effects

Irritation to respiratory tract

May cause respiratory irritation.

11.3 Symptoms related to the physical, chemical and toxicological characteristics

In case of skin contact

Repeated exposure may cause skin dryness or cracking.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter :	LC50 (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Species :	Pimephales promelas (fathead minnow)
Effective dose :	18 mg/l
Exposure time :	96 h
Parameter :	LC50 (XYLENE ; CAS No. : 1330-20-7)
Species :	Oncorhynchus mykiss (Rainbow trout)
Effective dose :	2,6 mg/l
Exposure time :	96 h
Method :	OECD 203
Parameter :	LC50 (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Species :	Oryzias latipes (Ricefish)
Effective dose :	> 100 mg/l
Exposure time :	96 h

Chronic (long-term) fish toxicity

Parameter :	NOEC (XYLENE ; CAS No. : 1330-20-7)
Species :	Oncorhynchus mykiss (Rainbow trout)
Effective dose :	> 1,3 mg/l
Exposure time :	56 Days
Parameter :	NOEC (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Species :	Oryzias latipes (Ricefish)
Effective dose :	47,5 mg/l
Exposure time :	14 Days

Acute (short-term) daphnia toxicity

Parameter :	EC50 (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Species :	Daphnia magna (Big water flea)
Effective dose :	44 mg/l
Exposure time :	48 h
Parameter :	EC50 (XYLENE ; CAS No. : 1330-20-7)
Species :	Daphnia magna (Big water flea)
Effective dose :	1 mg/l
Exposure time :	24 h
Method :	OECD 202
Parameter :	EC50 (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Species :	Daphnia magna (Big water flea)
Effective dose :	> 500 mg/l
Exposure time :	48 h

Chronic (long-term) daphnia toxicity

Parameter :	NOEC (XYLENE ; CAS No. : 1330-20-7)
Species :	Daphnia
Effective dose :	1,17 mg/l
Exposure time :	7 Days
Parameter :	NOEC (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Species :	Daphnia magna (Big water flea)
Effective dose :	> 100 mg/l
Exposure time :	21 Days

Acute (short-term) algae toxicity

Parameter :	EC50 (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Species :	Desmodesmus subspicatus
Effective dose :	647,7 mg/l
Exposure time :	72 h
Parameter :	EL50 (N-BUTYL ACETATE ; CAS No. : 123-86-4)
Species :	Desmodesmus subspicatus
Effective dose :	200 mg/l
Parameter :	EC50 (XYLENE ; CAS No. : 1330-20-7)
Species :	Pseudokirchneriella subcapitata

Effective dose :	2,2 mg/l
Exposure time :	72 h
Method :	OECD 201
Parameter :	ErC50 (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Species :	Pseudokirchneriella subcapitata
Effective dose :	> 1000 mg/l
Exposure time :	3 h
Parameter :	EC50 (ETHANOL ; CAS No. : 64-17-5)
Species :	Daphnia magna (Big water flea)
Effective dose :	> 10000 mg/l
Exposure time :	48 h
Parameter :	EC50 (ETHANOL ; CAS No. : 64-17-5)
Species :	Chlorella vulgaris
Effective dose :	275 mg/l
Exposure time :	72 h

Chronic (long-term) algae toxicity

Parameter :	NOEC (XYLENE ; CAS No. : 1330-20-7)
Species :	Pseudokirchneriella subcapitata
Effective dose :	0,44 mg/l
Exposure time :	72 h

Bacteria toxicity

Parameter :	EC50 (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Species :	Mysidopsis bahia
Effective dose :	> 1000 mg/l
Exposure time :	0,5 h

12.2 Persistence and degradability

Biodegradation

Parameter :	Biodegradation (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Inoculum :	Biodegradation
Effective dose :	100 %
Exposure time :	8 Days
Parameter :	Biodegradation (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Inoculum :	Biodegradation
Effective dose :	> 90 %
Exposure time :	28 Days

The solvent is biodegradable. In accordance with the required stability the product is poorly biodegradable.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

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 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

Additional information

Do not allow uncontrolled discharge of product into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Dispose according to legislation.

Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

EWC-Code: 08 01 11.

Waste code packaging

Uncleaned packaging: EWC-Code: 15 01 10.

Waste treatment options

Appropriate disposal / Package

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

13.2 Additional information

Note sections 7 and 8.

SECTION 14: Transport information

14.1 UN number

UN 1950

14.2 UN proper shipping name

Land transport (ADR/RID)

AEROSOLS

Sea transport (IMDG)

AEROSOLS

Air transport (ICAO-TI / IATA-DGR)

AEROSOLS, FLAMMABLE

14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es) :	2
Classification code :	5F
Hazard identification number (Kemler No.) :	23
Tunnel restriction code :	D
Special provisions :	LQ 1 l · E 0
Hazard label(s) :	2.1

Sea transport (IMDG)

Class(es) :	2.1
EmS-No. :	F-D / S-U
Special provisions :	LQ 1 l · E 0
Hazard label(s) :	2.1

Air transport (ICAO-TI / IATA-DGR)

Class(es) :	2.1
Special provisions :	E 0
Hazard label(s) :	2.1

14.4 Packing group

14.5 Environmental hazards

Land transport (ADR/RID) : No

Sea transport (IMDG) : No

Air transport (ICAO-TI / IATA-DGR) : No

14.6 Special precautions for user

None

SECTION 15: Regulatory information

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

EU legislation

Note TRGS 001. Note TRGS 400.

Other regulations (EU)

Restrictions of occupation

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

National regulations

Water hazard class (WGK)

Class : 2 (Significant hazardous to water) Classification according to AwSV

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Indication of changes

15. Restrictions on use

16.2 Abbreviations and acronyms

TRGS: German Technical Rule for Hazardous Substances. BGR(I): Rule (Information) from the german employers liability insurance association. DGUV: German Statutory Accident Insurance. AwSV: Ordinance on plants for the handling of substances hazardous to water. VCI: German chemical industry association. EWC: European Waste Catalogue.

16.3 Key literature references and sources for data

None

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

Calculation method.

16.5 Relevant H- and EUH-phrases (Number and full text)

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

16.6 Training advice

None

16.7 Additional information

None

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