

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

1.1 Product identifier

Silver-Star - Wheel silver
Article number: 2893883

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

1.2.1 Relevant uses

Varnish paint

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Normfest GmbH
Siemensstraße 23
42551 Velbert / GERMANY
Phone +49 2051 275-0
Fax +49 2051 275-141
Homepage www.normfest.com
E-mail info@normfest.de

Address enquiries to

Technical information

info@normfest.de

Safety Data Sheet

sdb@chemiebuero.de (No dispatch of safety data sheets)

Safety data sheets are available from the supplier.

1.4 Emergency telephone number

Advisory body

Call NHS 111 or a doctor

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Aerosol 1: H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated.

Eye Irrit. 2: H319 Causes serious eye irritation.

STOT SE 3: H336 May cause drowsiness or dizziness.

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.
The determination of properties hazardous to health does not take the propellant or carrier material into account.

Hazard pictograms



Signal word

DANGER

Contains:

Acetone

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.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C / 122°F.
P261 Avoid breathing vapours / spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / eye protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER / doctor if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice / attention.
P501 Dispose of contents/container in accordance with local/national regulation.

2004/42/CE

660 g/L II B e Special finishes (max. 840 g/l)

2.3 Other hazards

Environmental hazards

Does not contain any PBT or vPvB substances.
Contains no ingredients with endocrine-disrupting properties.

Other hazards

Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
25 - <50	Acetone
	CAS: 67-64-1, EINECS/ELINCS: 200-662-2, EU-INDEX: 606-001-00-8, Reg-No.: 01-2119471330-49-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Eye Irrit. 2: H319 - STOT SE 3: H336 - EUH066
10 - <25	Propane
	CAS: 74-98-6, EINECS/ELINCS: 200-827-9, EU-INDEX: 601-003-00-5, Reg-No.: 01-2119486944-21-XXXX
	GHS/CLP: Flam. Gas 1A: H220 - Press. Gas: H280
5 - <10	Butane
	CAS: 106-97-8, EINECS/ELINCS: 203-448-7, EU-INDEX: 601-004-00-0, Reg-No.: 01-2119474691-32-XXXX
	GHS/CLP: Flam. Gas 1A: H220 - Press. Gas: H280
5 - <10	Nitrocellulose
	CAS: 9004-70-0, EINECS/ELINCS: 682-719-5
	GHS/CLP: Flam. Sol. 2: H228
5 - <10	iso-Butane
	CAS: 75-28-5, EINECS/ELINCS: 200-857-2, EU-INDEX: 601-004-00-0, Reg-No.: 01-2119485395-27-XXXX
	GHS/CLP: Flam. Gas 1A: H220 - Press. Gas: H280
1 - <5	n-Butyl acetate
	CAS: 123-86-4, EINECS/ELINCS: 204-658-1, EU-INDEX: 607-025-00-1, Reg-No.: 01-2119485493-29-XXXX
	GHS/CLP: Flam. Liq. 3: H226 - STOT SE 3: H336 - EUH066
1 - <5	2-Methoxy-1-methylethyl acetate
	CAS: 108-65-6, EINECS/ELINCS: 203-603-9, EU-INDEX: 607-195-00-7, Reg-No.: 01-2119475791-29-XXXX
	GHS/CLP: Flam. Liq. 3: H226 - STOT SE 3: H336
1 - <5	Ethanol
	CAS: 64-17-5, EINECS/ELINCS: 200-578-6, EU-INDEX: 603-002-00-5, Reg-No.: 01-2119457610-43-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Eye Irrit. 2: H319
	SCL [%]: >= 50: Eye Irrit. 2: H319
1 - <2.5	Xylene, mixture of isomers
	CAS: 1330-20-7, EINECS/ELINCS: 215-535-7, EU-INDEX: 601-022-00-9, Reg-No.: 01-2119488216-32-XXXX
	GHS/CLP: Flam. Liq. 3: H226 - Acute Tox. 4: H312 H332 - Skin Irrit. 2: H315 - STOT RE 2: H373 - Asp. Tox. 1: H304 - Eye Irrit. 2: H319 - STOT SE 3: H335 - Aquatic Chronic 3: H412
1 - <2.5	1,2-Benzenedicarboxylic acid, benzyl C7-9-branched and linear alkyl esters
	CAS: 68515-40-2, EINECS/ELINCS: 271-082-5, Reg-No.: 01-2119519234-46-XXXX
<1	Butyl glycolate
	CAS: 7397-62-8, EINECS/ELINCS: 230-991-7, Reg-No.: 01-2119514685-36-XXXX
	GHS/CLP: Eye Dam. 1: H318 - Repr. 2: H361

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Change soaked clothing.

Inhalation

Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact

In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

Eye contact

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

Ingestion

Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.
In the event of symptoms seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects
Drowsiness
Vertigo

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide.
Water spray jet.
Dry powder.
Foam.

Extinguishing media that must not
be used Full water jet.

5.2 Special hazards arising from the substance or mixture

risk of formation of toxic pyrolysis products, carbon monoxide (CO), not combusted
hydrocarbons
Bursting aerosols can be forcibly projected from a fire.

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Fire residues and contaminated firefighting water must be disposed of in accordance with
the local regulations.
Cool containers at risk with water spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
Ensure adequate ventilation.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, diatomaceous
earth).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
Keep away from all sources of ignition - Refrain from smoking.
Vapours can form an explosive mixture with air.
Do not eat, drink, smoke or take drugs at work.
Wash hands before breaks and after work.
Use barrier skin cream.



7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.

Do not store together with oxidizing agents.

Keep container in a well-ventilated place.

Keep in a cool place, heat causes increase in pressure and risk of bursting.

Protect from heat/overheating and from sun.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection
8.1 Control parameters
**Ingredients with occupational
exposure limits to be monitored (GB)**

Substance
Butane
CAS: 106-97-8, EINECS/ELINCS: 203-448-7, EU-INDEX: 601-004-00-0, Reg-No.: 01-2119474691-32-XXXX
Long-term exposure: 600 ppm, 1450 mg/m ³
Short-term exposure (15-minute): 750 ppm, 1810 mg/m ³
iso-Butane
CAS: 75-28-5, EINECS/ELINCS: 200-857-2, EU-INDEX: 601-004-00-0, Reg-No.: 01-2119485395-27-XXXX
Long-term exposure: 600 ppm, 1450 mg/m ³ , (Butane)
Short-term exposure (15-minute): 750 ppm, 1810 mg/m ³
Acetone
CAS: 67-64-1, EINECS/ELINCS: 200-662-2, EU-INDEX: 606-001-00-8, Reg-No.: 01-2119471330-49-XXXX
Long-term exposure: 500 ppm, 1210 mg/m ³
Short-term exposure (15-minute): 1500 ppm, 3620 mg/m ³
2-Methoxy-1-methylethyl acetate
CAS: 108-65-6, EINECS/ELINCS: 203-603-9, EU-INDEX: 607-195-00-7, Reg-No.: 01-2119475791-29-XXXX
Long-term exposure: 50 ppm, 274 mg/m ³ , Sk
Short-term exposure (15-minute): 100 ppm, 548 mg/m ³
Ethanol
CAS: 64-17-5, EINECS/ELINCS: 200-578-6, EU-INDEX: 603-002-00-5, Reg-No.: 01-2119457610-43-XXXX
Long-term exposure: 1000 ppm, 1920 mg/m ³
n-Butyl acetate
CAS: 123-86-4, EINECS/ELINCS: 204-658-1, EU-INDEX: 607-025-00-1, Reg-No.: 01-2119485493-29-XXXX
Long-term exposure: 150 ppm, 724 mg/m ³
Short-term exposure (15-minute): 200 ppm, 966 mg/m ³
Xylene, mixture of isomers
CAS: 1330-20-7, EINECS/ELINCS: 215-535-7, EU-INDEX: 601-022-00-9, Reg-No.: 01-2119488216-32-XXXX
Long-term exposure: 50 ppm, 220 mg/m ³ , Sk, BMGV
Short-term exposure (15-minute): 100 ppm, 441 mg/m ³

**Ingredients with occupational
exposure limits to be monitored (EU)**

Substance / EC LIMIT VALUES
Acetone
CAS: 67-64-1, EINECS/ELINCS: 200-662-2, EU-INDEX: 606-001-00-8, Reg-No.: 01-2119471330-49-XXXX
Eight hours: 500 ppm, 1210 mg/m ³
2-Methoxy-1-methylethyl acetate
CAS: 108-65-6, EINECS/ELINCS: 203-603-9, EU-INDEX: 607-195-00-7, Reg-No.: 01-2119475791-29-XXXX
Eight hours: 50 ppm, 275 mg/m ³ , H
Short-term (15-minute): 100 ppm, 550 mg/m ³
n-Butyl acetate
CAS: 123-86-4, EINECS/ELINCS: 204-658-1, EU-INDEX: 607-025-00-1, Reg-No.: 01-2119485493-29-XXXX
Eight hours: 50 ppm, 241 mg/m ³
Short-term (15-minute): 150 ppm, 723 mg/m ³
Xylene, mixture of isomers

CAS: 1330-20-7, EINECS/ELINCS: 215-535-7, EU-INDEX: 601-022-00-9, Reg-No.: 01-2119488216-32-XXXX

Eight hours: 50 ppm, 221 mg/m³, HShort-term (15-minute): 100 ppm, 442 mg/m³**DNEL**

Substance

1,2-Benzenedicarboxylic acid, benzyl C7-9-branched and linear alkyl esters, CAS: 68515-40-2

Industrial, inhalative, Long-term - systemic effects, 1.32 mg/m³

Industrial, dermal, Long-term - systemic effects, 2.8 mg/kg bw/day

general population, inhalative, Long-term - systemic effects, 230 ng/m³

general population, dermal, Long-term - systemic effects, 1 mg/kg bw/day

general population, oral, Long-term - systemic effects, 0.1 mg/kg bw/day

iso-Butane, CAS: 75-28-5

There are no DNEL values established for the substance.

Propane, CAS: 74-98-6

There are no DNEL values established for the substance.

Butane, CAS: 106-97-8

There are no DNEL values established for the substance.

n-Butyl acetate, CAS: 123-86-4

Industrial, dermal, Acute - systemic effects, 11 mg/kg bw/day

Industrial, inhalative, Long-term - systemic effects, 300 mg/m³Industrial, inhalative, Long-term - local effects, 300 mg/m³Industrial, inhalative, Acute - systemic effects, 600 mg/m³

Industrial, dermal, Long-term - systemic effects, 11 mg/kg bw/day

Industrial, inhalative, Acute - local effects, 600 mg/m³

general population, oral, Acute - systemic effects, 2 mg/kg bw/day

general population, oral, Long-term - systemic effects, 2 mg/kg bw/day

general population, dermal, Long-term - systemic effects, 6 mg/kg bw/day

general population, inhalative, Long-term - systemic effects, 35.7 mg/m³

general population, dermal, Acute - systemic effects, 6 mg/kg bw/day

general population, inhalative, Acute - systemic effects, 300 mg/m³general population, inhalative, Acute - local effects, 300 mg/m³general population, inhalative, Long-term - local effects, 35.7 mg/m³

Ethanol, CAS: 64-17-5

Industrial, dermal, Long-term - systemic effects, 8238 mg/kg bw/day

Industrial, inhalative (vapor), Long-term - systemic effects, 380 mg/m³general population, inhalative (vapor), Long-term - systemic effects, 114 mg/m³

Acetone, CAS: 67-64-1

Industrial, dermal, Long-term - systemic effects, 186 mg/kg bw/d

Industrial, inhalative, Long-term - systemic effects, 1210 mg/m³Industrial, inhalative, Long-term - local effects, 2420 mg/m³general population, inhalative, Long-term - systemic effects, 200 mg/m³

general population, oral, Long-term - systemic effects, 62 mg/kg bw/d

general population, dermal, Long-term - systemic effects, 62 mg/kg bw/d

Xylene, mixture of isomers, CAS: 1330-20-7

Industrial, dermal, Long-term - systemic effects, 212 mg/kg bw/day

Industrial, inhalative (vapor), Long-term - systemic effects, 221 mg/m³Industrial, inhalative (vapor), Long-term - local effects, 221 mg/m³

Industrial, inhalative (vapor), Acute - local effects, 442 mg/m ³
general population, inhalative (vapor), Long-term - systemic effects, 65.3 mg/m ³
general population, inhalative (vapor), Long-term - local effects, 65.3 mg/m ³
general population, dermal, Long-term - systemic effects, 125 mg/kg bw/day
general population, oral, Long-term - systemic effects, 12.5 mg/kg bw/day
general population, inhalative (vapor), Acute - local effects, 260 mg/m ³
Butyl glycolate, CAS: 7397-62-8
Industrial, inhalative, Long-term - systemic effects, 7.05 mg/m ³
Industrial, dermal, Long-term - systemic effects, 10 mg/kg bw/day
general population, dermal, Long-term - systemic effects, 25 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 1.74 mg/m ³
2-Methoxy-1-methylethyl acetate, CAS: 108-65-6
Industrial, dermal, Long-term - systemic effects, 796 mg/kg bw/day
Industrial, inhalative, Acute - local effects, 550 mg/m ³
Industrial, inhalative, Long-term - systemic effects, 275 mg/m ³
general population, oral, Long-term - systemic effects, 36 mg/kg bw/day
general population, dermal, Long-term - systemic effects, 320 mg/kg bw/day
general population, inhalative, Long-term - local effects, 33 mg/m ³
general population, inhalative, Long-term - systemic effects, 33 mg/m ³
general population, oral, Acute - systemic effects, 500 mg/kg bw/day

PNEC

Substance
iso-Butane, CAS: 75-28-5
There are no PNEC values established for the substance.
Propane, CAS: 74-98-6
There are no PNEC values established for the substance.
Butane, CAS: 106-97-8
There are no PNEC values established for the substance.
n-Butyl acetate, CAS: 123-86-4
sewage treatment plants (STP), 35.6 mg/L (AF= 10)
seawater, 0.018 mg/L (AF= 1000)
sediment (freshwater), 0.981 mg/kg/ dw
sediment (seawater), 0.098 mg/kg/ dw
soil, 0.09 mg/kg/ dw
freshwater, 0.18 mg/L (AF= 100)
Ethanol, CAS: 64-17-5
seawater, 0.79 mg/l
sewage treatment plants (STP), 580 mg/L
sediment (seawater), 2.9 mg/kg sediment dw
soil, 0.63 mg/kg soil dw
oral (food), 0.38 g/kg
freshwater, 0.96 mg/l
sediment (freshwater), 3.6 mg/kg sediment dw
Acetone, CAS: 67-64-1
sewage treatment plants (STP), 100 mg/L
soil, 29.5 mg/kg soil dw
sediment (seawater), 3.04 mg/kg sediment dw
sediment (freshwater), 30.4 mg/kg sediment dw

seawater, 1.06 mg/L
freshwater, 10.6 mg/L
Xylene, mixture of isomers, CAS: 1330-20-7
sediment (seawater), 12.46 mg/kg sediment dw
freshwater, 0.327 mg/l
seawater, 0.327 mg/l
sediment (freshwater), 12.46 mg/kg sediment dw
soil, 2.31 mg/kg soil dw
sewage treatment plants (STP), 6.58 mg/l
Butyl glycollate, CAS: 7397-62-8
freshwater, 50 µg/l
seawater, 5 µg/l
sewage treatment plants (STP), 232 mg/l
sediment (freshwater), 203 µg/kg dw
sediment (seawater), 20.3 µg/kg dw
soil, 11.2 µg/kg dw
2-Methoxy-1-methylethyl acetate, CAS: 108-65-6
seawater, 0.064 mg/L
sewage treatment plants (STP), 100 mg/L
soil, 0.29 mg/kg soil dw
sediment (seawater), 0.329 mg/kg sediment dw
sediment (freshwater), 3.29 mg/kg sediment dw
freshwater, 0.635 mg/L

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	0.7 mm Butyl rubber, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	Solvent-resistant protective clothing (EN 340)
Other	Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)
Thermal hazards	No information available.
Delimitation and monitoring of the environmental exposition	not determined

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Form	aerosol
Color	see product designation
Odor	characteristic
Odour threshold	not applicable
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not applicable
Flash point [°C]	<0 (active substance)
Flammability	365
Lower explosion limit	1.7 Vol. %
Upper explosion limit	13 Vol. %
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	360
Density [g/cm³]	not determined
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	immiscible
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	not determined
Kinematic viscosity	not applicable
Relative vapour density	not applicable
Evaporation speed	not applicable
Melting point [°C]	not applicable
Auto-ignition temperature [°C]	not applicable
Decomposition temperature [°C]	not applicable
Particle characteristics	No information available.

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Risk of bursting.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Strong oxidizing agent.



10.6 Hazardous decomposition products

Flammable gases/vapours.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity**

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

Product
ATE-mix, oral, >2000 mg/kg bw
Substance
Nitrocellulose, CAS: 9004-70-0
LD50, oral, Rat, 5000 mg/kg bw (GESTIS)
1,2-Benzenedicarboxylic acid, benzyl C7-9-branched and linear alkyl esters, CAS: 68515-40-2
LD50, oral, Rat, >15800 mg/kg bw (IUCLID)
n-Butyl acetate, CAS: 123-86-4
LD50, oral, Rat, 10760 mg/kg (OECD 423)
Ethanol, CAS: 64-17-5
LD50, oral, Rat, 10470 mg/kg (OECD 401)
Acetone, CAS: 67-64-1
LD50, oral, Rat, 5800 mg/kg (OECD 401)
Xylene, mixture of isomers, CAS: 1330-20-7
LD50, oral, Rat, >2000 - 5000 mg/kg bw
Butyl glycolate, CAS: 7397-62-8
LD50, oral, Rat, 4595 mg/kg bw
2-Methoxy-1-methylethyl acetate, CAS: 108-65-6
LD50, oral, Rat, > 5000 mg/kg

Acute dermal toxicity

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

Product
ATE-mix, dermal, >2000 mg/kg bw
Substance
1,2-Benzenedicarboxylic acid, benzyl C7-9-branched and linear alkyl esters, CAS: 68515-40-2
LD50, dermal, Rabbit, >7940/kg bw (IUCLID)
n-Butyl acetate, CAS: 123-86-4
LD50, dermal, Rabbit, >14112 mg/kg (OECD 402)
Ethanol, CAS: 64-17-5
LD50, dermal, Rabbit, > 2000 mg/kg (OECD 402)
Acetone, CAS: 67-64-1
LD50, dermal, Rabbit, > 15800 mg/kg
2-Methoxy-1-methylethyl acetate, CAS: 108-65-6
LD50, dermal, Rat, > 2000 mg/kg

Acute inhalational toxicity

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

Product
ATE-mix, inhalativ (mist), >20 mg/L
Substance
iso-Butane, CAS: 75-28-5
LC50, inhalative, mouse, 1237 mg/l (2h) (Lit.)

Propane, CAS: 74-98-6
LC50, inhalative, Rat, > 1443 mg/l (15 min) (Lit.)
Butane, CAS: 106-97-8
LC50, inhalative, Rat, 658 mg/l (4 h) (Lit.)
n-Butyl acetate, CAS: 123-86-4
LC50, inhalative, Rat, 23.4 mg/l (4h) (OECD 403)
Ethanol, CAS: 64-17-5
LC50, inhalative, Rat, 117-125 mg/l/4h (OECD 403)
Acetone, CAS: 67-64-1
LC50, inhalative, Rat, 76 mg/l (4h)
Xylene, mixture of isomers, CAS: 1330-20-7
LC50, inhalation (vapour), Rat, 11 mg/L (4h)
Butyl glycolate, CAS: 7397-62-8
LC50, inhalative, Rat, >6.2 mg/L (4h)

Serious eye damage/irritation

Irritant

Substance
iso-Butane, CAS: 75-28-5
Eye, non-irritating
Propane, CAS: 74-98-6
Eye, non-irritating
n-Butyl acetate, CAS: 123-86-4
Eye, Rabbit, OECD 405, non-irritating
Ethanol, CAS: 64-17-5
Eye, irritant
Acetone, CAS: 67-64-1
Eye, Rabbit, OECD 405, irritant
Xylene, mixture of isomers, CAS: 1330-20-7
Eye, Rabbit, irritant
2-Methoxy-1-methylethyl acetate, CAS: 108-65-6
Eye, Rabbit, OECD 405, non-irritating

Skin corrosion/irritation

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

Substance
iso-Butane, CAS: 75-28-5
dermal, non-irritating
Propane, CAS: 74-98-6
dermal, non-irritating
Butane, CAS: 106-97-8
non-irritating
n-Butyl acetate, CAS: 123-86-4
dermal, Rabbit, OECD 404, non-irritating
Ethanol, CAS: 64-17-5
dermal, non-irritating
Acetone, CAS: 67-64-1
No information available., non-irritating
Xylene, mixture of isomers, CAS: 1330-20-7
dermal, Rabbit, irritant

2-Methoxy-1-methylethyl acetate, CAS: 108-65-6

dermal, Rabbit, OECD 404, non-irritating

Respiratory or skin sensitisation

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

Substance

iso-Butane, CAS: 75-28-5

inhalative, non-sensitizing

dermal, non-sensitizing

Propane, CAS: 74-98-6

inhalative, non-sensitizing

dermal, non-sensitizing

Butane, CAS: 106-97-8

dermal, non-sensitizing

inhalative, non-sensitizing

n-Butyl acetate, CAS: 123-86-4

dermal, Guinea pig, In vivo study, non-sensitizing

Ethanol, CAS: 64-17-5

dermal, non-sensitizing

Acetone, CAS: 67-64-1

No information available., non-sensitizing

Xylene, mixture of isomers, CAS: 1330-20-7

dermal, mouse, OECD 429, non-sensitizing

2-Methoxy-1-methylethyl acetate, CAS: 108-65-6

dermal, Guinea pig, OECD 406, non-sensitizing

**Specific target organ toxicity —
single exposure**

Vapours may cause drowsiness and dizziness.

Substance

iso-Butane, CAS: 75-28-5

inhalative, non-irritating

Propane, CAS: 74-98-6

inhalative, non-irritating

Butane, CAS: 106-97-8

inhalative, non-irritating

n-Butyl acetate, CAS: 123-86-4

No information available.

Acetone, CAS: 67-64-1

No information available., Kann Schläfrigkeit und Benommenheit verursachen.,

Xylene, mixture of isomers, CAS: 1330-20-7

No information available., Kann die Atemwege reizen,

2-Methoxy-1-methylethyl acetate, CAS: 108-65-6

inhalative, positive

**Specific target organ toxicity —
repeated exposure**

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

Substance

iso-Butane, CAS: 75-28-5

NOAEC, inhalative, Rat, 4437 mg/m³, The effects observed are not sufficient for classification.

Propane, CAS: 74-98-6

NOAEC, inhalative, Rat, 4437 mg/m ³ , The effects observed are not sufficient for classification.
n-Butyl acetate, CAS: 123-86-4
NOAEL, oral, Rat, 196 mg/kg bw/day, In vivo study, negativ
NOAEC, inhalative, Rat, 2400 mg/m ³ , In vivo study, negativ
Ethanol, CAS: 64-17-5
NOAEL, oral, mouse, 9400 mg/kg bw/day (subchronic), no adverse effect observed
Acetone, CAS: 67-64-1
NOAEL, oral, Rat, 900 mg/kg bw/day, negativ
NOAEC, inhalative, Rat, 22.500 mg/m ³ , negativ
Xylene, mixture of isomers, CAS: 1330-20-7
NOAEL, oral, Rat, 250 mg/kg bw/day, Kann die Organe schädigen bei längerer oder wiederholter Exposition.,
NOAEC, inhalative, Dog, 250 mg/kg bw/day, Kann die Organe schädigen bei längerer oder wiederholter Exposition.,
2-Methoxy-1-methylethyl acetate, CAS: 108-65-6
NOAEL, oral, Rat, 1000 mg/kg, OECD 422, no adverse effect observed

Mutagenicity

Does not contain a relevant substance that meets the classification criteria.

Substance
n-Butyl acetate, CAS: 123-86-4
Ames-test, negativ
Acetone, CAS: 67-64-1
negativ, Studie in vitro,
Xylene, mixture of isomers, CAS: 1330-20-7
mouse, OECD 476, negativ
2-Methoxy-1-methylethyl acetate, CAS: 108-65-6
in vitro, OECD 417, negativ

Reproduction toxicityThis product contains one or more substances of categorie Repr. 2 (CLP).
(CAS: 7397-62-8)**- Fertility**

Substance
n-Butyl acetate, CAS: 123-86-4
NOAEC, inhalative, Rat, 9640 mg/m ³ , OECD 416, negativ
Ethanol, CAS: 64-17-5
NOAEL, oral, mouse, 20700 mg/kg bw/day (subchronic), no adverse effect observed, Effect on fertility,
Acetone, CAS: 67-64-1
NOAEC, inhalative, Rat, 5 300 mg/m ³
Xylene, mixture of isomers, CAS: 1330-20-7
NOAEC, inhalative, Rat (male), 2 171 mg/m ³ , negativ
2-Methoxy-1-methylethyl acetate, CAS: 108-65-6
NOAEL, oral, Rat, 1000 mg/kg bw/day, OECD 422, no adverse effect observed, Effect on fertility,
NOAEC, inhalative, Rat, 5400 mg/m ³ (subchronic), no adverse effect observed, Effect on fertility,

- Development

Substance
n-Butyl acetate, CAS: 123-86-4
LOAEC, inhalation (vapour), Rat, 7230 mg/m ³ , OECD 414, adverse effect observed
Ethanol, CAS: 64-17-5

NOAEC, inhalative, Rat, 30400 mg/m ³ (subchronic), no adverse effect observed, Effect on developmental toxicity,

Acetone, CAS: 67-64-1

NOAEC, inhalative, Rat, 5 300 mg/m ³

Xylene, mixture of isomers, CAS: 1330-20-7
--

NOAEC, inhalative, Rat (male), 2 171 mg/m ³ , negativ
--

Carcinogenicity

Does not contain a relevant substance that meets the classification criteria.

Substance

Acetone, CAS: 67-64-1

No information available.

Xylene, mixture of isomers, CAS: 1330-20-7
--

NOAEL, oral, Rat, 500 mg/kg bw/day, negativ, EU Method B.32,
--

2-Methoxy-1-methylethyl acetate, CAS: 108-65-6
--

NOAEC, inhalative, Rat, 11058 mg/m ³ , OECD 453, no adverse effect observed
--

Aspiration hazard

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

General remarks

Toxicological data of complete product are not available.

11.2 Information on other hazards**Endocrine disrupting properties**

Contains no ingredients with endocrine-disrupting properties.

Other information

none

SECTION 12: Ecological information

12.1 Toxicity

Substance
1,2-Benzenedicarboxylic acid, benzyl C7-9-branched and linear alkyl esters, CAS: 68515-40-2
LC50, (96h), Pimephales promelas, 0.3 mg/L (IUCLID)
EC50, (48h), Daphnia magna, 0.3 mg/L (IUCLID)
EC50, (96h), Selenastrum capricornutum, 0.3 mg/L (IUCLID)
iso-Butane, CAS: 75-28-5
LC50, (96h), fish, 7.71 - 19.37 mg/L
Butane, CAS: 106-97-8
LC50, (48h), Daphnia magna, 14.22 - 69.43 mg/L
LC50, (96h), fish, 24.11 - 147.54 mg/L
EC50, (96h), Algae, 7.71 - 19.37 mg/L
n-Butyl acetate, CAS: 123-86-4
LC50, (96h), Pimephales promelas, 18 mg/l (OECD 203)
EC50, (48h), Daphnia magna, 44 mg/l
EC50, (72h), Desmodesmus subspicatus, 647.7 mg/l
IC50, Bacteria, 356 mg/l (40 h)
NOEC, Desmodesmus subspicatus, 200 mg/l
Ethanol, CAS: 64-17-5
LC50, (96h), Oncorhynchus mykiss, 13000 mg/l (OECD 203)
LC50, (48h), Daphnia magna, 12340 mg/l
EC50, (48h), Selenastrum capricornutum, 12900 mg/l (OECD 201)
EC50, (72h), Algae, 275 mg/l (OECD 201)
Acetone, CAS: 67-64-1
LC50, (48h), Daphnia pulex, 8800 mg/l
LC50, (96h), Oncorhynchus mykiss, 5540 mg/l
NOEC, (28d), Daphnia magna, 2212 mg/l
NOEC, (96h), Algae, 430 mg/l
Xylene, mixture of isomers, CAS: 1330-20-7
LC50, (96h), Pimephales promelas, 26.07 mg/L
EC50, (48h), Daphnia magna, 1 mg/L
IC50, (72h), Algae, 2.2 mg/L
Butyl glycollate, CAS: 7397-62-8
EC50, (16h), Pseudomonas putida, 2320 mg/L
EC50, (24h), Daphnia magna, 280 mg/L
LC0, (48h), Leuciscus idus, 50 mg/L
2-Methoxy-1-methylethyl acetate, CAS: 108-65-6
LC50, (96h), Oncorhynchus mykiss, 134 mg/l (OECD 203)
EC50, (48h), Daphnia magna, > 500 mg/l
EC50, (72h), Selenastrum capricornutum, > 1000 mg/l (OECD 201)
NOEC, Oryzias latipes, 47.5 mg/l (14 d) (OECD 204)
NOEC, (21d), Daphnia magna, ≥ 100 mg/l (OECD 202)
EC10, Bacteria, > 1000 mg/l (0.5 h) (ISO 8192)

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

Ecological data of complete product are not available.

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.

Waste no. (recommended)

160504* gases in pressure containers (including halons) containing dangerous substances

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Waste no. (recommended)

150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID 1950

Inland navigation (ADN) 1950

Marine transport in accordance with IMDG 1950

Air transport in accordance with IATA 1950

14.2 UN proper shipping name

Transport by land according to ADR/RID	Aerosols
- Classification Code	5F
- Label	
- ADR LQ	1 I
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 2 (D)

Inland navigation (ADN)	Aerosols
- Classification Code	5F
- Label	

Marine transport in accordance with IMDG	Aerosols
- EMS	F-D, S-U
- Label	
- IMDG LQ	1 I

Air transport in accordance with IATA	Aerosols, flammable
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	2
Inland navigation (ADN)	2
Marine transport in accordance with IMDG	2.1
Air transport in accordance with IATA	2.1

14.4 Packing group

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC; 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2023)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	Observe employment restrictions for young people.
- VOC (2010/75/CE)	85 %

15.2 Chemical safety assessment

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

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H361 Suspected of damaging fertility or the unborn child.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.
H335 May cause respiratory irritation.
H304 May be fatal if swallowed and enters airways.
H373 May cause damage to organs through prolonged or repeated exposure.
H315 Causes skin irritation.
H312+H332 Harmful in contact with skin or if inhaled.
H226 Flammable liquid and vapour.

H228 Flammable solid.
H280 Contains gas under pressure; may explode if heated.
H220 Extremely flammable gas.
EUH066 Repeated exposure may cause skin dryness or cracking.
H336 May cause drowsiness or dizziness.
H319 Causes serious eye irritation.
H225 Highly flammable liquid and vapour.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
 ATE = acute toxicity estimate
 CAS = Chemical Abstracts Service
 CLP = Classification, Labelling and Packaging
 DMEL = Derived Minimum Effect Level
 DNEL = Derived No Effect Level
 EC50 = Median effective concentration
 ECB = European Chemicals Bureau
 EEC = European Economic Community
 EINECS = European Inventory of Existing Commercial Chemical Substances
 EL50 = Median effective loading
 ELINCS = European List of Notified Chemical Substances
 EmS = Emergency Schedules
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
 IC50 = Inhibition concentration, 50%
 IMDG = International Maritime Code for Dangerous Goods
 IUCLID = International Uniform Chemical Information Database
 IVIS = In vitro irritation score
 LC50 = Lethal concentration, 50%
 LD50 = Median lethal dose
 LC0 = lethal concentration, 0%
 LOAEL = lowest-observed-adverse-effect level
 LL50 = Median lethal loading
 LQ = Limited Quantities
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships
 NOAEL = No Observed Adverse Effect Level
 NOEC = No Observed Effect Concentration
 PBT = Persistent, Bioaccumulative and Toxic substance
 PNEC = Predicted No-Effect Concentration
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
 STP = Sewage Treatment Plant
 TLV®/TWA = Threshold limit value – time-weighted average
 TLV®STEL = Threshold limit value – short-time exposure limit
 VOC = Volatile Organic Compounds
 vPvB = very Persistent and very Bioaccumulative

16.3 Other information**Classification procedure**

Aerosol 1: H222 Extremely flammable aerosol. (Bridging principle "Aerosols") H229
 Pressurised container: May burst if heated. (Bridging principle "Aerosols")
 Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
 STOT SE 3: H336 May cause drowsiness or dizziness. (Calculation method)

Modified position

SECTION 2 been added: Contains no ingredients with endocrine-disrupting properties.
 SECTION 9 been added: liquid
 SECTION 11 been added: Contains no ingredients with endocrine-disrupting properties.
 SECTION 11 been added: Based on available data, the classification criteria are not met.
 SECTION 11 been added: Based on available data, the classification criteria are not met.
 SECTION 11 been added: Based on available data, the classification criteria are not met.
 SECTION 12 been added: Contains no ingredients with endocrine-disrupting properties.

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