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

1.1 Product identifier

Waxoyl PF Aerosol

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

1.2.1 Relevant uses

Corrosion protection

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company
Waxoyl GmbH
Hermann-Albertz-Str. 17-23
46045 Oberhausen / GERMANY
Phone +49 (0)208 410 221
E-mail info@waxoyl.ch

Manufacturer
Waxoyl AG
Mühlemattstrasse 24
4104 Oberwil / SWITZERLAND
Phone +41 61 281 77 94
Homepage www.waxoyl.com
E-mail info@waxoyl.ch

Address enquiries to

Technical information info@waxoyl.ch

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 +49 (0)89-19240 (24h) (English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Aerosol 1: H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated.
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways.
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

Hazard pictograms



Signal word DANGER

Contains: Distillates (petroleum), hydrotreated light paraffinic

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

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt)

Hazard statements
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H304 May be fatal if swallowed and enters airways.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER / doctor.
P331 Do NOT induce vomiting.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C / 122 °F.
P501 Dispose of contents/container in accordance with local/national regulation.

Special labelling EUH066 Repeated exposure may cause skin dryness or cracking.

Contains: Sulfonic acids, petroleum, calcium salts. EUH208 May produce an allergic reaction.

2004/42/CE 447 g/L II B e Special finishes (max. 840 g/l)

2.3 Other hazards

Physico-chemical hazards Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.

Human health dangers Contains no ingredients with endocrine-disrupting properties.

Environmental hazards Does not contain any PBT or vPvB substances.

Other hazards Because of the high vapour pressure, containers are liable to burst if temperature rises.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
25 - 30	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
10 - 15	Distillates (petroleum), hydrotreated light paraffinic
	CAS: 64742-55-8, EINECS/ELINCS: 265-158-7, EU-INDEX: 649-468-00-3, Reg-No.: 01-2119487077-29-XXXX
	GHS/CLP: Asp. Tox. 1: H304
10 - 15	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
	EINECS/ELINCS: 918-481-9, Reg-No.: 01-2119457273-39-XXXX
	GHS/CLP: Asp. Tox. 1: H304 - EUH066
5 - 10	isobutane
	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
5 - 10	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics
	CAS: 64742-49-0, EINECS/ELINCS: 920-750-0, Reg-No.: 01-2119473851-33-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Asp. Tox. 1: H304 - Aquatic Chronic 2: H411 - STOT SE 3: H336 - EUH066
2,5 - 5	Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt)
	CAS: 64742-65-0, EINECS/ELINCS: 265-169-7, Reg-No.: 01-2119471299-27-XXXX
	GHS/CLP: Asp. Tox. 1: H304
2,5 - 5	Destillates (petroleum), hydrotreated heavy paraffinic (containing <3% DMSO extract)
	CAS: 64742-54-7, EINECS/ELINCS: 265-157-1, EU-INDEX: 649-467-00-8, Reg-No.: 01-2119484627-25-XXXX
	GHS/CLP: Asp. Tox. 1: H304
2,5 - 5	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
1 - 2,5	Sulfonic acids, petroleum, calcium salts
	CAS: 61789-86-4, EINECS/ELINCS: 263-093-9, Reg-No.: 01-2119488992-18-XXXX
	GHS/CLP: Skin Sens. 1B: H317
	SCL [%]: >= 10: Skin Sens. 1B: H317
0,1 - 1	n-Hexane
	CAS: 110-54-3, EINECS/ELINCS: 203-777-6, EU-INDEX: 601-037-00-0
	GHS/CLP: Flam. Liq. 2: H225 - Asp. Tox. 1: H304 - Skin Irrit. 2: H315 - STOT SE 3: H336 - Repr. 2: H361f - STOT RE 1: H372 - Aquatic Chronic 2: H411

Comment on component parts For full text of H-statements: see SECTION 16.
Mineral oil containing mixture. Mineral oil with < 3% DMSO extract, as measured by IP 346.
< 0,1 % 1,3-butadiene (CAS 106-99-0, EC 203-450-8)

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Take off contaminated clothing and wash before reuse.

Inhalation Remove person to fresh air and keep comfortable for breathing.
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 Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion Rinse mouth.
Do not induce vomiting.
Consult a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects
Allergic reactions
Stomachache.
Nausea, vomiting.
Diarrhoea

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.
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 within 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.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Dispose of absorbed material in accordance within the regulations.
Take up residues with absorbent material (e.g. sand).

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.
Provide suitable vacuuming at the processing machines and in the processing area.
Avoid spilling or spraying in enclosed areas.
Avoid breathing mist/vapours/spray.

Keep away from all sources of ignition - Refrain from smoking.
Vapours can form an explosive mixture with air.
Use only non-sparking tools.

Do not eat, drink, smoke or snuff while working.
Take off contaminated clothing and wash before reuse.
After worktime and before work breaks the affected skin areas must be thoroughly cleaned.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.
Prevent penetration into the ground.

Do not store together with oxidizing agents.
Do not store together with food and animal food/diet.

Protect from heat/overheating.
Protect from sun.
Recommended storage temperature: 10 °C - 35 °C.

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 EU (2004/37/EG)

Substance / EC LIMIT VALUES
n-Hexane
CAS: 110-54-3, EINECS/ELINCS: 203-777-6, EU-INDEX: 601-037-00-0
Eight hours: 20 ppm, 72 mg/m³

DNEL

Substance
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
There are no DNEL values established for the substance.
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
Industrial, inhalative (vapor), Long-term - systemic effects, 2035 mg/m³
Industrial, dermal, Long-term - systemic effects, 773 mg/kg bw
general population, dermal, Long-term - systemic effects, 699 mg/kg bw
general population, inhalative (vapor), Long-term - systemic effects, 608 mg/m³
general population, oral, Long-term - systemic effects, 699 mg/kg bw
isobutane, 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.
Destillates (petroleum), hydrotreated heavy paraffinic (containing <3% DMSO extract), CAS: 64742-54-7
Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m³
Industrial, inhalative, Long-term - local effects, 5.58 mg/m³
Industrial, dermal, Long-term - systemic effects, 970 µg/kg bw/day
general population, inhalative, Long-term - local effects, 1.19 mg/m³
general population, oral, Long-term - systemic effects, 740 µg/kg bw/day
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
Industrial, inhalative, Long-term - systemic effects, 2,73 mg/m³
Industrial, inhalative, Long-term - local effects, 5,58 mg/m³
Industrial, dermal, Long-term - systemic effects, 970 µg/kg bw/day
general population, oral, Long-term - local effects, 740 µg/kg bw/day
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
Industrial, inhalative, Long-term - systemic effects, 11,75 mg/m³
Industrial, dermal, Long-term - systemic effects, 3,33 mg/kg bw/d
Industrial, dermal, Long-term - local effects, 1,03 mg/cm²
general population, inhalative, Long-term - systemic effects, 2,9 mg/m³
general population, dermal, Long-term - systemic effects, 1,667 mg/kg bw/day
general population, dermal, Long-term - local effects, 0,513 mg/cm²
general population, oral, Long-term - systemic effects, 0,833 mg/kg bw/day
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
Industrial, inhalative, Long-term - systemic effects, 2,73 mg/m³
Industrial, inhalative, Long-term - local effects, 5,58 mg/m³
Industrial, dermal, Long-term - systemic effects, 0,97 mg/kg
general population, oral, Long-term - systemic effects, 0,74 mg/kg

PNEC

Substance
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
There are no PNEC values established for the substance.
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0

There are no PNEC values established for the substance.
isobutane, 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.
Destillates (petroleum), hydrotreated heavy paraffinic (containing <3% DMSO extract), CAS: 64742-54-7
oral (food), 9,33 mg/kg
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
oral (food), 9,33 mg/kg food
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
freshwater, 1 mg/l (AF=1000)
seawater, 1 mg/l (AF=10000)
sewage treatment plants (STP), 1000 mg/l (AF=10)
sediment (freshwater), 226 000 000 mg/kg dw
sediment (seawater), 226 000 000 mg/kg dw
soil, 271 000 000 mg/kg dw
oral (food), 16,667 mg/kg food
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
oral (food), 9,33 mg/kg

8.2 Exposure controls

Additional advice on system design
Ensure adequate ventilation on workstation.

Eye protection
Tightly fitting goggles. (EN 166:2001)

Hand protection
0,4 mm NBR: acrylonitrile butadiene rubber, >480 min (EN 374-1/-2/-3).
0,4 mm Fluoro rubber, >480 min (EN 374-1/-2/-3).
0,7 mm Nitrile rubber, >480 min (EN 374-1/-2/-3).
The details concerned are recommendations. Please contact the glove supplier for further information.

Skin protection
Protective clothing (EN 340)

Other
Avoid contact with eyes and skin.
Do not breathe vapour/spray.
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
Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Form	aerosol
Color	white
Odor	characteristic
Odour threshold	not relevant
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point or initial boiling point and boiling range [°C]	No information available.
Flash point [°C]	No information available.
Flammability	Extremely flammable aerosol.
Lower explosion limit	1,5 - 1,86 Vol.-% (propellant)
Upper explosion limit	8,5 - 9,5 Vol.-% (propellant)
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/cm³]	0,784
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water [g/L]	insoluble
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	not determined
Kinematic viscosity	not determined
Relative vapour density	not determined
Melting point [°C]	not determined
Auto-ignition temperature [°C]	not determined
Decomposition temperature [°C]	not applicable
Particle characteristics	not applicable

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

When handled and stored properly, no hazardous reactions are anticipated.
In use, may form flammable/explosive vapour-air mixture.

10.2 Chemical stability

The product is stable under standard conditions.

10.3 Possibility of hazardous reactions

Heat causes increase in pressure and risk of bursting.
Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.

10.4 Conditions to avoid

See SECTION 7.2.

10.5 Incompatible materials

Oxidizing agent

10.6 Hazardous decomposition products

Toxic pyrolysis products.
Oxide of carbon (COx)

SECTION 11: Toxicological information

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

Acute oral toxicity

Product
Based on the available information, the classification criteria are not fulfilled.

Substance
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
LD50, oral, Rat, 5000 - 15000 mg/kg bw
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
LD50, oral, Rat, > 5000 mg/kg
Destillates (petroleum), hydrotreated heavy paraffinic (containing <3% DMSO extract), CAS: 64742-54-7
LD50, oral, Rat, > 5000 mg/kg bw
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
LD50, oral, Rat, 5000 mg/kg bw
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
LD50, oral, Rat, >5000 mg/kg bw
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
no adverse effect observed (by analogy with similar substances), (CAS 64742-56-9),
LC50, oral, Rat, > 5000 mg/kg, OECD 401
n-Hexane, CAS: 110-54-3
LD50, oral, Rat, 24 - 49 mL/kg bw

Acute dermal toxicity

Product
Based on the available information, the classification criteria are not fulfilled.

Substance
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
LD50, dermal, Rat, >2000 mg/kg bw
LD50, dermal, Rabbit, 3160 - 5000 mg/kg bw
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
LD50, dermal, Rat, > 2800 mg/kg
Destillates (petroleum), hydrotreated heavy paraffinic (containing <3% DMSO extract), CAS: 64742-54-7
LD50, dermal, Rabbit, > 5000 mg/kg bw
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
LD50, dermal, Rabbit, > 2000 - 5000 mg/kg bw
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
LD50, dermal, Rabbit, > 5000 mg/kg bw >5000 mg/kg bw
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
no adverse effect observed (by analogy with similar substances), (CAS 64742-56-9),
LD50, dermal, Rabbit, > 5000 mg/kg, OECD 402
n-Hexane, CAS: 110-54-3
LD50, dermal, Rabbit, 3350 mg/kg
LD50, dermal, Rabbit, 5 mL/kg bw

Acute inhalational toxicity

Product
Based on the available information, the classification criteria are not fulfilled.

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

LC50, inhalative, Rat, 5 mg/L air, 8h
LC50, inhalative, Rat, 41 - 4467 ppm, 8h
LC50, inhalative, Rat, 4,951 - 9,3 mg/L air, 4h
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
LC50, inhalative, Rat, > 23,3 mg/l (4h)
isobutane, CAS: 75-28-5
LC50, inhalative, Rat, 1442 mg/l (15min)
Propane, CAS: 74-98-6
LC50, inhalative, Rat, > 1443 mg/l (15 min) (Lit.)
Butane, CAS: 106-97-8
LC50, inhalative, Rat, 1443 mg/L air (15min)
Destillates (petroleum), hydrotreated heavy paraffinic (containing <3% DMSO extract), CAS: 64742-54-7
LC50, inhalative, Rat, 2.18 - 5.53 mg/L air, 4h
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
LC50, inhalative, Rat, 2,18 - 5,53 mg/L air 4h, 4h
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
LC50, inhalative, Rat, >1.9 mg/L air
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
LC50, inhalativ (mist), Rat, > 5,53 mg/l, OECD 403, 4h
n-Hexane, CAS: 110-54-3
LC50, inhalative, Rat, 17,6 mg/L

Serious eye damage/irritation Based on the available information, the classification criteria are not fulfilled.

Substance
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Eye, OECD 405, Slight irritant effect - does not require labelling.
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
Rabbit, in vivo (Federal Register of the F.D.A. Test for e, non-irritating
isobutane, CAS: 75-28-5
Eye, non-irritating
Propane, CAS: 74-98-6
Eye, non-irritating
Butane, CAS: 106-97-8
Eye, non-irritating
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
Eye, non-irritating
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
Eye, no adverse effect observed
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
Rabbit (eye), OECD 405, non-irritating
n-Hexane, CAS: 110-54-3
Eye, Rabbit, OECD 405, non-irritating

Skin corrosion/irritation Based on the available information, the classification criteria are not fulfilled.

Substance
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
OECD 404, Repeated exposure may cause skin dryness or cracking.
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
Rabbit, in vivo, OECD 404, non-irritating
isobutane, CAS: 75-28-5
dermal, non-irritating
Propane, CAS: 74-98-6
dermal, non-irritating
Butane, CAS: 106-97-8

dermal, non-irritating
Destillates (petroleum), hydrotreated heavy paraffinic (containing <3% DMSO extract), CAS: 64742-54-7
OECD 404, non-irritating
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
dermal, non-irritating
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
dermal, no adverse effect observed
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
Rabbit, in vivo, non-irritating
n-Hexane, CAS: 110-54-3
Harmonised classification: Skin Irrit. 2 H315

Respiratory or skin sensitisation Based on the available information, the classification criteria are not fulfilled.

Substance
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
dermal, OECD 406, non-sensitizing
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
Guinea pig, in vivo (non-LLNA), OECD 406, non-sensitizing
isobutane, CAS: 75-28-5
dermal, non-sensitizing
inhalative, non-sensitizing
Propane, CAS: 74-98-6
dermal, non-sensitizing
inhalative, non-sensitizing
Butane, CAS: 106-97-8
inhalative, non-sensitizing
dermal, non-sensitizing
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
dermal, non-sensitizing
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
dermal, sensitising
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
dermal, Guinea pig, OECD 406, non-sensitizing
n-Hexane, CAS: 110-54-3
dermal, mouse, OECD 429, no adverse effect observed

Specific target organ toxicity — single exposure Based on the available information, the classification criteria are not fulfilled.

Substance
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
inhalative, adverse effect observed
isobutane, CAS: 75-28-5
inhalative, non-irritating
Propane, CAS: 74-98-6
inhalative, non-irritating
Butane, CAS: 106-97-8
inhalative, non-irritating
n-Hexane, CAS: 110-54-3
Harmonised classification: STOT SE 3 H336

Specific target organ toxicity — repeated exposure Based on the available information, the classification criteria are not fulfilled.

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

NOAEL, dermal, Rabbit, 2000 mg/kg bw/day
NOAEL, oral, Rat, 500 mg/kg bw/day
NOAEC, inhalative, Rat, 6000 mg/m³
NOAEC, inhalative, mouse, 11600 mg/m³
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
NOAEC, inhalative, Rat, 8117 mg/m³, OECD 413, no adverse effect observed
isobutane, CAS: 75-28-5
NOAEC, inhalative, Rat, 4437 mg/m³, The effects observed are not sufficient for classification.
Butane, CAS: 106-97-8
NOAEC, inhalative, Rat, 4437 mg/m³, The effects observed are not sufficient for classification.
Destillates (petroleum), hydrotreated heavy paraffinic (containing <3% DMSO extract), CAS: 64742-54-7
NOAEL, dermal, Rat, 30 - 2000 mg/kg bw/day
NOAEL, dermal, Rabbit, 1000 mg/kg bw/day
NOAEC, inhalative, Rat, 980 mg/m³ air
LOAEL, oral, Rat, 125 mg/kg bw/day
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
NOAEL, inhalative, Rat, 980 mg/m³ air, no adverse effect observed
LOAEL, dermal, mouse, 100 mg/kg bw/day, The effects observed are not sufficient for classification.
LOAEL, oral, Rat, 125 mg/kg bw/day, The effects observed are not sufficient for classification.
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
NOAEL, oral, Rat, 500 mg/kg bw/day, adverse effect observed
NOAEL, dermal, Rat, 1000 mg/kg bw/day, no adverse effect observed
NOAEC, inhalative, Rat, 881,58 mg/m³, no adverse effect observed
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
no adverse effect observed (by analogy with similar substances), (CAS 64742-04-7),
NOAEL, dermal, Rat, ≥ 2000 mg/kg, OECD 411
NOAEL, inhalative, Rat, > 980 mg/m³, OECD 412
LOAEL, oral, Rat, 125 mg/kg, OECD 408
n-Hexane, CAS: 110-54-3
Harmonised classification: STOT RE 2 H373

Mutagenicity Based on the available information, the classification criteria are not fulfilled.

Substance
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
substance with similar structure, OECD 471, 473, 474, 476, 478, 479, negative
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
NOEL, oral, mouse, > 2000 mg/kg, OECD 474, no adverse effect observed
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
in vitro, negative
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
in vitro, OECD 471, negative
in vivo, OECD 474, negative

Reproduction toxicity Based on the available information, the classification criteria are not fulfilled.

- Fertility

Substance
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
NOAEL, inhalation (vapour), Rat, 9000 ppm, OECD 416, no adverse effect observed
Destillates (petroleum), hydrotreated heavy paraffinic (containing <3% DMSO extract), CAS: 64742-54-7
NOAEL, oral, Rat, 1000 mg/kg bw/d (Effect on fertility), no adverse effect observed
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
NOAEL, oral, Rat, 1000 mg/kg bw/d, no adverse effect observed
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
NOAEL, Rat, (P, F1) : ≥ 1000 mg/kg, OECD 421

n-Hexane, CAS: 110-54-3
Harmonised classification: Repr. 2 H361f

- Development

Substance
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
NOAEC, inhalative, Rat, 5220 mg/m³
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
inhalative, no adverse effect observed
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
NOAEL, Rat, 2000 mg/kg, OECD 414
LOAEL, Rat, 125 mg/kg, OECD 414

Carcinogenicity Based on the available information, the classification criteria are not fulfilled.

Substance
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
substance with similar structure, OECD 453, negative
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
no adverse effect observed

Aspiration hazard May be fatal if swallowed and enters airways.
Based on the available information, the classification criteria are fulfilled.
Calculation method

General remarks

The determination of properties hazardous to health does not take the propellant or carrier material into account.
Toxicological data of complete product are not available.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties Contains no ingredients with endocrine-disrupting properties.

11.2.2 Other information none

SECTION 12: Ecological information

12.1 Toxicity

Substance
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
EL0, (72h), Pseudokirchneriella subcapitata, 1 g/L
EL0, (48h), Daphnia magna, 1 g/L
NOELR, (28d), Fish, 101 µg/L
NOELR, (72h), Algae, 1 g/L
LL0, (96h), Oncorhynchus mykiss, 1 g/L
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0
LC50, (96h), Daphnia magna, < 10 mg/l
EL50, (72h), Pseudokirchneriella subcapitata, > 10 - 30 mg/l
NOEC, (21d), Daphnia magna, 0,17 mg/l
NOELR, (72h), Pseudokirchneriella subcapitata, > 10 mg/l
LL50, (96h), Oncorhynchus mykiss, > 13,4 mg/l
LOEC, (21d), Daphnia magna, 0,32 mg/l
isobutane, CAS: 75-28-5
LC50, (96h), Fish, 29,535 mg/L
Butane, CAS: 106-97-8
LC50, (96h), Fish, 24,11 - 147,54 mg/L
LC50, (48h), Invertebrates, 14,22 - 69,43 mg/L
EC50, (96h), Algae, 7,71 - 19,37 mg/L
Destillates (petroleum), hydrotreated heavy paraffinic (containing <3% DMSO extract), CAS: 64742-54-7
EC50, (48h), > 10000 mg/l (Gammarus pulex), OECD 202
EC50, (72h), Algae, > 100 mg/l
NOEC, (72h), Pseudokirchneriella subcapitata, ≥ 100 mg/l, OECD 201
NOEC, (21d), Daphnia magna, 10 mg/l, OECD 211
LL50, (96h), Fish, > 100 mg/l, OECD 203
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
NOELR, (14d), Fish, 1 g/L
LL50, (96h), Invertebrates, 10 g/L
LL50, (96h), Fish, 100 mg/L
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
NOEC, (72h), Pseudokirchneriella subcapitata, 1000 mg/l
LL50, (96h), Fish, > 10 000 mg/l
EC0, (48h), Daphnia magna, >1000 mg/l
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
LC50, (96h), Pimephales promelas, > 100 mg/l, OECD 203
EL50, (48h), Daphnia magna, > 10 000 mg/l, OECD 202
NOELR, (14d), Oncorhynchus mykiss, >= 1000 mg/l
NOEL, (72h), Pseudokirchneriella subcapitata, >= 100 mg/l, OECD 201
NOEL, (21d), Daphnia magna, 10 mg/l, OECD 211
NOEL, (72h), Pseudokirchneriella subcapitata, >= 100 mg/l, OECD 201
n-Hexane, CAS: 110-54-3
LC50, (96h), Pimephales promelas, 2,5 mg/l (ECOTOX)
EC50, (48h), Daphnia magna, 2,1 mg/l (Lit)

12.2 Persistence and degradability

Behaviour in environment compartments not determined

Behaviour in sewage plant not determined

Biological degradability not determined

Substance
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
(28d), >= 60 %, OECD 301 F
isobutane, CAS: 75-28-5
The product is readily biodegradable.
Propane, CAS: 74-98-6
The product is readily biodegradable.
Butane, CAS: 106-97-8
The product is readily biodegradable.
Destillates (petroleum), hydrotreated heavy paraffinic (containing <3% DMSO extract), CAS: 64742-54-7
(28d), 31 %, OECD 301 F, The product is not readily biodegradable.
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
Biological degradability:, (28d), 2 - 31,13 %, QSAR, The product is not readily biodegradable.
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
(28d), 8,6 %
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
(28d), 2 - 4 %, OECD 301 B
(28d), 31,13 %, OECD 301 F
The product is not readily biodegradable.
n-Hexane, CAS: 110-54-3
(28d), 98 %, OECD 301 F, The product is readily biodegradable.

12.3 Bioaccumulative potential

No information available.

Substance
isobutane, CAS: 75-28-5
log Kow, 2,88
Propane, CAS: 74-98-6
log Kow, 1,815
Butane, CAS: 106-97-8
log Kow, 2,89
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
BCF, 0,4 - 71100 L/kg, QSAR

12.4 Mobility in soil

Spillages may penetrate the soil causing ground water contamination.

Substance
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
log Koc, 1,71- 14,70, QSAR

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

None known.

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

For recycling, consult manufacturer.
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
150104

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 l
- 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 l
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/EG (2000/532/EC); 2010/75/EU; 2004/42/EG; (EG) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EWG ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 2024/573; (EU) 2019/1148; (EU) 2019/1021, (EU) 2023/707
- Comment on component parts	SVHC (Candidate List of Substances of Very High Concern for authorisation) ≥ 0.1% CAS 110-54-3 - n-Hexane
- Annex XIV (REACH)	According to Annex XIV of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances ≥ 0.1% that are subject to authorisation.
- Annex XVII (REACH)	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product contains ≥ 0.1% of substances with the following restrictions. 40, 75
	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product is subject to the following restrictions. 3
TRANSPORT-REGULATIONS	ADR (2025); IMDG-Code (2025, 42. Amdt.); IATA-DGR (2026, 67th Edition)
NATIONAL REGULATIONS (EU):	
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	62 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H372 Causes damage to organs (Central nervous system) through prolonged or repeated exposure if inhaled.
H361f Suspected of damaging fertility.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
H225 Highly flammable liquid and vapour.
EUH066 Repeated exposure may cause skin dryness or cracking.
H304 May be fatal if swallowed and enters airways.

H280 Contains gas under pressure; may explode if heated.
H220 Extremely flammable gas.

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

This document does not comply with Regulation (EC) No 1907/2006, article 31 (5) and may be used for internal purposes only.

Classification procedure

Aerosol 1: H222 Extremely flammable aerosol. (Bridging principle "Aerosols") H229 Pressurised container: May burst if heated. (Calculation method)
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways. (Calculation method)
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects. ()

Modified position

none

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