

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

1.1 Product identifier

Lubrifix Fettkartusche
Article number: Id.-Nr. 1339629

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

1.2.1 Relevant uses

Grease

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company RÖHM GmbH
Heinrich-Roehm-Str. 50
89567 Sontheim / GERMANY
Phone +49(0)7325 16-0
Fax +49(0)7325 16-510
Homepage www.roehm.biz
E-mail info@roehm.biz

Address enquiries to

Technical information info@roehm.biz

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

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

Company +49(0)7325 16-0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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.

Skin Irrit. 2: H315 Causes skin irritation.

Skin Sens. 1: H317 May cause an allergic skin reaction.

Repr. 2: H361f Suspected of damaging fertility.

STOT SE 3: H336 May cause drowsiness or dizziness.

2.2 Label elements

The product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200 (HCS 2012)

Hazard pictograms



Signal word

DANGER

Hazard statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.
H361f Suspected of damaging fertility.

Precautionary statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from flames and hot surfaces. 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 vapors.
P280 Wear protective gloves.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P310 Immediately call a POISON CENTER/doctor.
P302+P352 IF ON SKIN: Wash with plenty of water/soap.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container to in accordance with local/regional/national/international regulation.

2.3 Other hazards

Human health dangers

If swallowed or in the event of vomiting, risk of product entering the lungs.

Environmental hazards

Does not contain any PBT or vPvB substances.

Other hazards

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

SECTION 3: Composition / Information on ingredients

Product-type:

3.2 The product is a mixture.

Range [%]	Substance
20 - < 50	Butane CAS: 106-97-8
25 - 50	Naphtha (petroleum), hydrotreated light, CAS 64742-49-0
25 - < 70	Propane CAS: 74-98-6
2,5 - < 10	Carbon CAS: 7440-44-0
0 - 2	iso-Butane CAS: 75-28-5
0,1 - 2,5	Aluminium powder (pyrophoric) CAS: 7429-90-5
0,1 - 2,5	Propylene carbonate CAS: 108-32-7
0,25 - < 2,5	n-Hexane CAS: 110-54-3
0 - 1	Ethane CAS: 74-84-0
0,1 - 1	Chromium CAS: 7440-47-3
0,25 - 1	Aromatic naphtha, CAS 64742-95-6
0,25 - 1	Cyclohexane CAS: 110-82-7
0,25 - < 1	Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) EG 931-384-6
0,1 - < 1	Nickel CAS: 7440-02-0
0,1 - < 0,25	N,N-bis(2-ethylhexil)-4-metil-1H-benzotriazol-1-metilamina CAS: 80584-90-3
0,1 - < 0,25	N,N-Bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine CAS: 80595-74-0

Comment on component parts none

SECTION 4: First aid measures

4.1 Description of first aid measures

General information	Take off contaminated clothing and wash before reuse.
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	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	Consult a doctor immediately. Do not induce vomiting. Rinse mouth.

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

Treat symptomatically.
Forward this sheet to the doctor.
If swallowed or in the event of vomiting, risk of product entering the lungs.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media foam, dry powder, water spray jet, carbon dioxide
Sand.

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.
Cool containers at risk with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
Ensure adequate ventilation.
Wear suitable protective equipment. For personal protection see SECTION 8.
Use breathing apparatus.

6.2 Environmental precautions

In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Take up residues with absorbent material (e.g. sand, sawdust, general purpose binder, 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.
Provide good room ventilation even at ground level (vapors are heavier than air).
Avoid contact with eyes and skin. Use personal protective equipment.
Keep away from open flames, hot surfaces and sources of ignition.
Pressurised container: May burst if heated.
Do not pierce or burn, even after use.
Use explosion-proofed equipment/fittings and non-sparking tools.
Take precautionary measures against static discharges.
Do not eat, drink or smoke when using this product.
Wash hands before breaks and after work.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.

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.

Do not keep at temperatures above 50 °C/122°F.

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 (US)

Substance
Naphtha (petroleum), hydrotreated light
CAS 64742-49-0
Long-term exposure: 100 ppm, 525 mg/m ³ , OSHA
Propane
CAS: 74-98-6
Long-term exposure: 1000 ppm, 1800 mg/m ³ , OSHA
Butane
CAS: 106-97-8
Long-term exposure: 800 ppm, 1900 mg/m ³ , NIOSH
Cyclohexane
CAS: 110-82-7
Long-term exposure: 300 ppm, 1050 mg/m ³ , OSHA
n-Hexane
CAS: 110-54-3
Long-term exposure: 500 ppm, 1800 mg/m ³ , NIOSH: 50ppm, 180 mg/m ³
Aluminium powder (pyrophoric)
CAS: 7429-90-5
Long-term exposure: 15 mg/m ³ , Total dust
Chromium
CAS: 7440-47-3
Long-term exposure: 0,5 mg/m ³ , OSHA
Nickel
CAS: 7440-02-0
Long-term exposure: 0,5 mg/m ³ , insoluble 0,1 mg/m ³ (Nickel, metal and insoluble compounds (as Ni))(OSHA)
N,N-Bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine
CAS: 80595-74-0
Long-term exposure: OSHA PEL
iso-Butane
CAS: 75-28-5
Long-term exposure: 1000 ppm, ACGIH 2011

DNEL

Substance
Naphtha (petroleum), hydrotreated light, CAS 64742-49-0
Industrial, inhalative, Long-term - systemic effects: 2035 mg/m ³ .
Industrial, dermal, Long-term - systemic effects: 773 mg/kg bw/d.
general population, oral, Long-term - systemic effects: 699 mg/kg bw/d.
general population, inhalative, Long-term - systemic effects: 608 mg/m ³ .
general population, dermal, Long-term - systemic effects: 699 mg/kg bw/d.
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched), CAS: -
Industrial, dermal, Long-term - systemic effects: 12,5 mg/kg/8h (ECHA CHEM).
Industrial, inhalative, Long-term - systemic effects: 8,56 mg/m ³ /8h (ECHA CHEM).
general population, oral, Long-term - systemic effects: 0,25 mg/kg bw/day.
general population, dermal, Acute - local effects: 0,024 mg/cm ² .

general population, dermal, Long-term - systemic effects: 6,25 mg/kg bw/day.
general population, inhalative, Long-term - systemic effects: 2,2 mg/m ³ .
Propylene carbonate, CAS: 108-32-7
Industrial, dermal, Long-term - local effects: 10 mg/kg bw/day.
Industrial, dermal, Long-term - systemic effects: 20 mg/kg bw/day.
Industrial, inhalative, Long-term - local effects: 20 mg/m ³ .
Industrial, inhalative, Long-term - systemic effects: 70,53 mg/m ³ .
general population, inhalative, Long-term - systemic effects: 17,4 mg/m ³ .
general population, oral, Long-term - local effects: 10 mg/kg bw/day.
general population, inhalative, Long-term - local effects: 10 mg/m ³ .
general population, dermal, Long-term - local effects: 10 mg/kg bw/day.
Aromatic naphtha, CAS 64742-95-6
Industrial, inhalative (vapor), Long-term - systemic effects: 150 mg/m ³ .
Industrial, dermal, Long-term - systemic effects: 25 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 11 mg/kg bw/day.
general population, oral, Long-term - systemic effects: 11 mg/kg bw/day.
general population, inhalative (vapor), Long-term - systemic effects: 32 mg/m ³ .

PNEC

Substance
Naphtha (petroleum), hydrotreated light, CAS 64742-49-0
There are no PNEC values established for the substance.,
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched), CAS: -
sewage treatment plants (STP), 24.33 mg/l (ECHA CHEM).
soil, 2,54 mg/kg soil dw (ECHA CHEM).
sediment (seawater), 0,313 mg/kg (ECHA CHEM).
sediment (freshwater), 3,13 mg/kg (ECHA CHEM).
seawater, 0,00012 mg/l (ECHA CHEM).
freshwater, 0,0012 mg/l (ECHA CHEM).
Propylene carbonate, CAS: 108-32-7
soil, 0,81 mg/kg.
sewage treatment plants (STP), 7400 mg/l.
freshwater, 0,9 mg/l.
seawater, 0,09 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	Not required under normal conditions.
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. 0,4 mm: Nitrile rubber, >480 min (EN 374-1/-2/-3).
Skin protection	Protective clothing (EN 340) 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. Do not inhale gases. Avoid contact with eyes and skin.
Respiratory protection	If ventilation is insufficient, wear respiratory protection. Short term: filter apparatus, filter A. (DIN EN 14387)
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	Dual-chamber aerosol can
Color	dark grey (Liquid)
Odor	like mineral oil
Odor threshold	No information available.
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	80 - 110 (176 - 230 °F) (Liquid)
Flash point [°C]	< 0 (< 32 °F) (Liquid) -80 (-112 °F) (1013 hPa) (Propellant)
Flammability [°C]	not applicable
Lower explosion limit	0,8 Vol. % (Liquid) 1,5 Vol. % (propellant)
Upper explosion limit	8,0 Vol. % (Liquid) 10,9 Vol. % (propellant)
Oxidizing properties	no
Vapor pressure/gas pressure [kPa]	2200 - 8400 hPa (20°C / 68°F) (propellant)
Density [g/ml]	ca. 0,9 (20 °C / 68°F) (Liquid) 0,5 - 0,58 (20°C / 68°F) (propellant)
Bulk density [kg/m³]	not applicable
Solubility in water	virtually insoluble
Partition coefficient [n-octanol/water]	not applicable
Viscosity	not applicable
Relative vapor density determined in air	not applicable
Evaporation speed	not applicable
Melting point [°C]	not applicable
Autoignition temperature [°C]	365 - 470 (689 - 878°F) (propellant)
Decomposition temperature [°C]	not applicable

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Heat causes increase in pressure and risk of bursting.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

Keep away from flames and hot surfaces.- No smoking.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Substance
Butane, CAS: 106-97-8
LC50, inhalative, Rat: 658 mg/L (IUCLID).
Cyclohexane, CAS: 110-82-7
LD50, dermal, Rabbit: > 2000 mg/kg (IUCLID).
LD50, oral, Rat: > 5000 mg/kg (IUCLID).
Naphtha (petroleum), hydrotreated light, CAS 64742-49-0
LD50, oral, Rat: > 5800 mg/kg.
LD50, dermal, Rabbit: > 3920 mg/kg.
LC50, inhalative, Rat: > 25,2 mg/l 4h.
n-Hexane, CAS: 110-54-3
LD50, oral, mouse: 5000 mg/kg (IUCLID).
LD50, dermal, Rabbit: 3000 mg/kg (IUCLID).
N,N-Bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, CAS: 80595-74-0
LD50, oral, Rat: > 2000 mg/kg.
Nickel, CAS: 7440-02-0
LD50, oral, Rat: 9000 mg/kg bw.
Propane, CAS: 74-98-6
LC50, inhalative, Rat: > 1443 mg/l (15 min) (Lit.).
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched), CAS: -
LD50, oral, Rat: 2000 mg/kg bw (OECD 401).
Propylene carbonate, CAS: 108-32-7
NOEC: 100 mg/m ³ /90d (OECD 413).
LD50, dermal, Rabbit: > 2000 mg/kg.
LD50, oral, Rat: 33520 mg/kg.
NOAEL, oral, Rat: 1000 mg/kg (OECD 414).
NOAEL, Rat: 5000 mg/kg (OECD 414).
NOEL, > 5000 mg/kg (OECD 408).
Aromatic naphtha, CAS 64742-95-6
LD50, oral, Rat: 6984 mg/kg.
LD50, dermal, Rabbit: 3160 mg/kg.
LC50, inhalative, Rat: 6,193 mg/L (4h).

Serious eye damage/irritation	Based on the information available, the classification criteria have not been fulfilled.
Skin corrosion/irritation	Irritant Calculation method
Respiratory or skin sensitisation	May cause an allergic skin reaction. Calculation method
Specific target organ toxicity — single exposure	Vapors may cause drowsiness and dizziness. Calculation method
Specific target organ toxicity — repeated exposure	Based on the information available, the classification criteria have not been fulfilled.
Mutagenicity	Based on the information available, the classification criteria have not been fulfilled.
Reproduction toxicity	Suspected of damaging fertility. Calculation method
Carcinogenicity	Based on the information available, the classification criteria have not been fulfilled.
Aspiration hazard	May be fatal if swallowed and enters airways.

Calculation method

General remarks

The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials. Toxicological data of complete product are not available.

SECTION 12: Ecological information**12.1 Toxicity**

Substance
Cyclohexane, CAS: 110-82-7
LC50, (96h), fish: 93,0 - 117 mg/l (IUCLID).
EC50, (48h), Daphnia magna: 3,78 mg/l (IUCLID).
Naphtha (petroleum), hydrotreated light, CAS 64742-49-0
EL50, (48h), Daphnia magna: 3 mg/l.
EL50, (72h), Pseudokirchneriella subcapitata: 30 - 100 mg/l.
NOEC, (21d), Daphnia magna: 0,17 mg/l.
LL50, (96h), Oncorhynchus mykiss: 11,4 mg/l.
LOEC, (21d), Daphnia magna: 0,32 mg/l.
n-Hexane, CAS: 110-54-3
LC50, (96h), Pimephales promelas: 2,5 mg/l (ECOTOX).
EC50, (48h), Daphnia magna: 2,1 mg/l (Lit).
N,N-Bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, CAS: 80595-74-0
LC50, (96h), Brachidanio rerio: 1,3 mg/l (OECD 203).
EC50, (24h), Daphnia magna: 1,4 mg/l (OECD 202).
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched), CAS: -
EC50, (96h), Pseudokirchneriella subcapitata: 6,4 mg/l (OECD 201).
EL50, (21d), Daphnia magna: 0,91 mg/l (OECD 211).
EL50, (48h), Daphnia magna: 91,4 mg/l (OECD 202).
LL50, (96h), Oncorhynchus mykiss: 24 mg/l (OECD 203).
Propylene carbonate, CAS: 108-32-7
LC50, (96h), fish: > 1000 mg/l (EU EC C.1).
EC50, (48h), Daphnia magna: > 1000 mg/l (OECD 202).
EC50, (16h), Bacteria: 25619 mg/l (DIN DIN 38412 Part 8).
NOEC, (72h), Algae: 900 mg/l (OECD 201).
ErC50, (72h), Algae: > 900 mg/l (OECD 201).
Aromatic naphtha, CAS 64742-95-6
LC50, (48h), Oncorhynchus mykiss: 9,22 mg/L.
EC50, (48h), Daphnia magna: 6,14 mg/L.

12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	No information available.
Biological degradability	No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

not applicable

12.6 Other adverse effects

Ecological data of complete product are not available.
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

For recycling, consult manufacturer.

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

RCRA Hazard Class (40 CFR 261)

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities.

SECTION 14: Transport

14.1 UN 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
DOT Road Shipment Information (49 CFR) 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 (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane)

- EMS F-D, S-U

- Label 

- IMDG LQ 1 I

Air transport in accordance with IATA Aerosols, flammable

- Label 

DOT Road Shipment Information (49 CFR) Aerosols

- 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

DOT Road Shipment Information (49 CFR) 2

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

DOT Road Shipment Information (49 CFR) not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID yes

Inland navigation (ADN) yes

Marine transport in accordance with IMDG MARINE POLLUTANT

Air transport in accordance with IATA yes

DOT Road Shipment Information (49 CFR) yes

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available.

SECTION 15: Regulatory information

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

US Regulations

National regulations

29 CFR 1910.1200-HCS 2012, OSHA-PEL, ACGIH-TLV, NTP, IARC, SARA Title III, NFPA, TSCA, California - Prop. 65

- SARA, 302

- SARA, 311

Flammable (gases, aerosols, liquids, or solids)
Aspiration Hazard
Skin Corrosion or Irritation
Specific target organ toxicity (single exposure)
Respiratory or Skin Sensitization
Reproductive toxicity

- SARA, 313

This product contain one ingredient regulated under this list(40 CFR part 372.65): CAS 7440-02-0 / CAS 7440-47-3 / CAS 7429-90-5 / CAS 110-54-3 / CAS 110-82-7

- CA Proposition 65



WARNING: This product can expose you to chemicals including "Nickel, CAS 7440-02-0", which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.



WARNING: This product can expose you to chemicals including "n-Hexane, CAS 110-54-3", which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov."

- TSCA

All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.

International Agency for Research on Cancer IARC

IARC: Group 2B carcinogen CAS 7440-02-0
IARC: Group 3 CAS 7440-47-3

National Toxicology Program - NTP

CAS 7440-02-0 is named in the NTP - National Toxicology Program.

HAP-VOC

VOC-content: 46,8 % (Liquid)
VOC-content: 100% (Propellant)

Transport-regulations

DOT-Classification, ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019)

15.2 Chemical safety assessment

For this product a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Abbreviations and acronyms:

ACGIH = American Conference of Governmental Industrial Hygienists;
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;
CAS = Chemical Abstracts Service;
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act;
CFR = Code of Federal Regulations;
CPR = Controlled Products Regulations;
DMEL = Derived Minimum Effect Level;
DNEL = Derived No Effect Level;
DOT = Department of Transportation;
EC50 = Median effective concentration;
EPA = Environmental Protection Agency;
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;
IARC = International Agency of Research on Cancer;
IATA = International Air Transport Association;
TSCA = Toxic Substance Control Act;
HMIS = Hazardous Materials Identification System;
NFPA = National Fire Protection Association;
NIOSH = National Institute for Occupational Safety and Health;
OSHA = Occupational Safety and Health Administration;
LC50 = Lethal concentration, 50%;
LD50 = Median lethal dose, 50%;
MARPOL = International Convention for the Prevention of Marine Pollution from Ships;
PBT = Persistent, Bioaccumulative and Toxic substance;
PNEC = Predicted No-Effect Concentration;
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals;
SARA = Superfund Amendments and Reauthorization Act;
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;

16.2 Ratings

HMIS Ratings

HEALTH	2	2 - Moderate Hazard
FLAMMABILITY	4	4 - Extreme Hazard
PHYSICAL HAZARD	0	0 - Minimal Hazard
PERSONAL PROTECTION	X	X - Personal protection rating to be supplied by user depending on use conditions

NFPA Ratings

3
2 0
-

TOP, FLAMMABILITY: 3 - Severe Hazard

LEFT, HEALTH: 2 - Moderate Hazard RIGHT, REACTIVITY: 0 - Minimal Hazard

BOTTOM, SPECIAL NOTICE: -

Modified position

none



Copyright: Chemiebüro®

