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

1.1 Product identifier

Waxoyl 120-4 Plus

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 AG
Seewenweg 5
4153 Reinach / SWITZERLAND
Phone +41-61-28177 94
Fax +41-61-28177 85
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)

Company +41-61-28177 94 Mo-Fr 8:00 - 16:00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Flam. Liq. 3: H226 Flammable liquid and vapor.
Eye Irrit. 2: H319 Causes serious eye irritation.
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 2024)

Hazard pictograms





Signal word WARNING

Contains: Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9

Hazard statements

H226 Flammable liquid and vapor.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from flames and hot surfaces. No smoking.
P243 Take precautionary measures against static discharge.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

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 If swallowed or in the event of vomiting, risk of product entering the lungs.
Contains no ingredients with endocrine-disrupting properties (≥ 0,1%).

Environmental hazards This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Contains no ingredients with endocrine-disrupting properties (≥ 0,1%).

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

This product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200.

SECTION 3: Composition / Information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
40 - < 85	Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9
5 - < 10	Sulfonic acids, petroleum, calcium salts
	CAS: 61789-86-4
1 - < 3	Phosphoric acid, C11-14-isoalkyl esters, C13-rich
	CAS: 154518-38-4
< 1	Alcohols, C11-14-iso-, C13-rich
	CAS: 68526-86-3

Comment on component parts For full text of H-statements: see SECTION 16.
Contains less than 3% w/w DMSO-extract (only for mineral oils)

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Take off contaminated clothing and wash before reuse.

Inhalation Remove the victim into fresh air and keep him calm.
In the event of symptoms seek medical treatment.

Skin contact When in contact with the skin, clean 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 Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.
Get medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Drowsiness
Vertigo
Irritant effects
Allergic reactions

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
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

Water spray jet.
Carbon dioxide.
Foam.
Dry powder.

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.

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Do not inhale explosion and/or combustion gases.

Cool containers at risk with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance within 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.
High risk of slipping due to leakage/spillage of product.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.
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 with absorbent material (e.g. sand).
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

Provide suitable vacuuming at the processing machines.
Provide good room ventilation even at ground level (vapors are heavier than air).
Use solvent-resistant equipment.
Avoid spilling or spraying in enclosed areas.

Keep away from all sources of ignition.
Vapors can form an explosive mixture with air.
Take precautionary measures against static discharges.
Ignitable mixtures can be formed in the empty container.

Do not eat, drink, smoke or take drugs at work.
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.
Keep only in original container.
Prevent penetration into the ground.

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

Keep container tightly closed.
Keep container in a well-ventilated place.
Protect from heat/overheating.

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)

Not applicable

DNEL

Substance
Alcohols, C11-14-iso-, C13-rich, CAS: 68526-86-3
Industrial, inhalative, Long-term - systemic effects, 147,9 mg/m³
Industrial, dermal, Long-term - systemic effects, 417 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 43,5 mg/m³
general population, dermal, Long-term - systemic effects, 250 mg/kg bw/day
general population, oral, Long-term - systemic effects, 25 mg/kg bw/day
Phosphoric acid, C11-14-isoalkyl esters, C13-rich, CAS: 154518-38-4
Industrial, inhalative, Long-term - systemic effects, 34,94 mg/m³
Industrial, dermal, Long-term - systemic effects, 100,13 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 10,43 mg/m³
general population, dermal, Long-term - systemic effects, 60,08 mg/kg bw/day
general population, oral, Long-term - systemic effects, 6,01 mg/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
Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9
Industrial, inhalative, Long-term - systemic effects, 871 mg/m³
Industrial, dermal, Long-term - systemic effects, 77 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 185 mg/m³
general population, dermal, Long-term - systemic effects, 46 mg/kg bw/day
general population, oral, Long-term - systemic effects, 46 mg/kg bw/day

PNEC

Substance
Alcohols, C11-14-iso-, C13-rich, CAS: 68526-86-3
freshwater, 0,005 mg/L
seawater, 0,5 µg/L
sewage treatment plants (STP), 105,3 mg/L
sediment (freshwater), 0,37 mg/kg sediment dw
sediment (seawater), 0,04 mg/kg sediment dw
soil, 0,15 mg/kg soil dw
Phosphoric acid, C11-14-isoalkyl esters, C13-rich, CAS: 154518-38-4
freshwater, 0,0063 mg/L
seawater, 0,00063 mg/L
sewage treatment plants (STP), 10 mg/L
sediment (freshwater), 0,113 mg/kg
sediment (seawater), 0,0113 mg/kg
soil, 0,0188 mg/kg
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
Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9
There are no PNEC values established for the substance.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	0,4mm Butyl rubber, >120 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 vapor/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.
Thermal hazards	None
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	Liquid
Color	whitish
Odor	characteristic
Odor threshold	Not applicable
pH-value	Not applicable
pH-value [1%]	Not applicable
Boiling point or initial boiling point and boiling range [°C]	> 136 (276°F)
Flash point [°C]	29 (84°F)
Flammability	yes
Lower explosion limit	ca. 0,6 Vol.%
Upper explosion limit	ca. 7 Vol.%
Oxidizing properties	No
Vapor pressure/gas pressure [kPa]	0,5 (20°C/ 68°F)
Density [g/cm³]	0,86 (20 °C / 68,0 °F)
Relative density	Not determined
Bulk density [kg/m³]	Not applicable
Solubility in water	virtually insoluble
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	Not determined
Kinematic viscosity	> 20,5 mm²/s (40°C)
Relative vapour density	Not determined
Melting point [°C]	Not determined
Auto-ignition temperature [°C]	> 200 (392°F)
Decomposition temperature [°C]	Not applicable
Particle characteristics	Not applicable

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

Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.
Reactions with strong oxidizing agents.
Uncleaned empty vessels may contain product gases which can form explosive mixtures with air.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Oxidizing agent

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

Product
ATE-mix, oral, > 2000 mg/kg

Substance
Alcohols, C11-14-iso-, C13-rich, CAS: 68526-86-3
LD50, oral, Rat, > 2000 mg/kg bw
Phosphoric acid, C11-14-isoalkyl esters, C13-rich, CAS: 154518-38-4
LD50, oral, Rat, > 2000 mg/kg (OECD 420)
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
LD50, oral, Rat, >5000 mg/kg bw
Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9
LD50, oral, Rat, 15000 mg/kg

Acute dermal toxicity

Product
ATE-mix, dermal, > 2000 mg/kg

Substance
Alcohols, C11-14-iso-, C13-rich, CAS: 68526-86-3
LD50, dermal, Rat, > 2000 mg/kg bw
Phosphoric acid, C11-14-isoalkyl esters, C13-rich, CAS: 154518-38-4
LD50, dermal, Rat, > 2000 mg/kg
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
LD50, dermal, Rabbit, > 5000 mg/kg bw >5000 mg/kg bw
Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9
LD50, dermal, Rabbit, > 3160 mg/kg

Acute inhalational toxicity

Product
ATE-mix, inhalativ (vapor), > 20 mg/l 4h

Substance
Alcohols, C11-14-iso-, C13-rich, CAS: 68526-86-3
LC50, inhalative, mouse, > 12,2 ppm (6 h)
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
LC50, inhalative, Rat, >1.9 mg/L air
Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9
LC50, inhalative, Rat, > 5000 mg/m³/8h

Serious eye damage/irritation Irritant
Based on the information available, the classification criteria have been fulfilled.
Toxicological data of complete product are not available.
Calculation method

Substance
Alcohols, C11-14-iso-, C13-rich, CAS: 68526-86-3
Eye, non-irritating
Phosphoric acid, C11-14-isoalkyl esters, C13-rich, CAS: 154518-38-4
Eye, irritant
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
Eye, no adverse effect observed

Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9
Eye, non-irritating

Skin corrosion/irritation

Based on the information available, the classification criteria have not been fulfilled.
Toxicological data of complete product are not available.

Substance
Alcohols, C11-14-iso-, C13-rich, CAS: 68526-86-3
dermal, irritant
Phosphoric acid, C11-14-isoalkyl esters, C13-rich, CAS: 154518-38-4
dermal, irritant
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
dermal, no adverse effect observed
Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9
dermal, non-irritating

Respiratory or skin sensitisation

No classification due to substance-specific concentration limits.
Based on the information available, the classification criteria have not been fulfilled.
Toxicological data of complete product are not available.

Substance
Alcohols, C11-14-iso-, C13-rich, CAS: 68526-86-3
dermal, non-sensitizing
Phosphoric acid, C11-14-isoalkyl esters, C13-rich, CAS: 154518-38-4
dermal, non-sensitizing
Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4
dermal, sensitising
Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9
dermal, non-sensitizing

Specific target organ toxicity — single exposure

Vapors may cause drowsiness and dizziness.
Based on the information available, the classification criteria have been fulfilled.
Toxicological data of complete product are not available.
Calculation method

Specific target organ toxicity — repeated exposure

Does not contain any relevant substances fulfilling the classification criteria.
Based on the information available, the classification criteria have not been fulfilled.
Toxicological data of complete product are not available.

Substance
Alcohols, C11-14-iso-, C13-rich, CAS: 68526-86-3
NOAEL, oral, Rat, 300 - 700 mg/kg bw/day
Phosphoric acid, C11-14-isoalkyl esters, C13-rich, CAS: 154518-38-4
BMDL10, oral, Rat, 240,3 mg/kg bw/day, adverse effect observed
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
Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9
NOAEL, oral, Rat, 500 mg/kg bw/day, negativ
NOAEL, inhalative, Rat, 6000 mg/m³, negativ

Mutagenicity

Does not contain any relevant substances fulfilling the classification criteria.
Based on the information available, the classification criteria have not been fulfilled.
Toxicological data of complete product are not available.

Substance
Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9
in vitro, negativ
in vivo, negativ

Reproduction toxicity Does not contain any relevant substances fulfilling the classification criteria.
Based on the information available, the classification criteria have not been fulfilled.
Toxicological data of complete product are not available.

- Fertility

Substance
Phosphoric acid, C11-14-isoalkyl esters, C13-rich, CAS: 154518-38-4
NOAEL, oral, Rat, 1000 mg/kg bw/da, no adverse effect observed

- Development

Substance
Phosphoric acid, C11-14-isoalkyl esters, C13-rich, CAS: 154518-38-4
NOAEL, oral, Rat, 316 mg/kg bw/day, no adverse effect observed
Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9
NOAEC, inhalative, Rat, 5220 mg/m³

Carcinogenicity Does not contain any relevant substances fulfilling the classification criteria.
Based on the information available, the classification criteria have not been fulfilled.
Toxicological data of complete product are not available.

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

General remarks

None

SECTION 12: Ecological information

12.1 Toxicity

Substance
Alcohols, C11-14-iso-, C13-rich, CAS: 68526-86-3
LC50, (96h), Fish, 420 µg/L
EC50, (72h), Algae, 2,6 - 3,2 mg/L
EL50, (48h), Invertebrates, 710 µg/L
NOEC, (72h), Algae, 1,5 - 2,2 mg/L
LL50, (96h), Fish, 640 µg/L
Phosphoric acid, C11-14-isoalkyl esters, C13-rich, CAS: 154518-38-4
LC50, (96h), Fish, 24 mg/L
EC50, (24h), Invertebrates, > 100 mg/L
EC50, (72h), Algae, 150 mg/L
NOEC, (72h), Algae, 10 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
Naphtha (petroleum), hydrotreated heavy, CAS 64742-48-9
EL50, (72h), Algae, > 1000 mg/l
NOELR, (72h), Algae, 100 mg/l
LL50, (96h), Oncorhynchus mykiss, > 1000 mg/l
LL50, (48h), Daphnia magna, >1000 mg/l

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

Accumulation in organisms is not expected.

12.4 Mobility in soil

Spillages may penetrate the soil causing ground water contamination.

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

Product

Dispose of as hazardous waste.
Disposal in an incineration plant in accordance with the regulations of the local authorities.

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

RCRA Hazard Class (40CFR 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	1139
Inland navigation (ADN)	1139
Marine transport in accordance with IMDG	1139
Air transport in accordance with IATA	1139
DOT Road Shipment Information (49 CFR)	1139

14.2 UN proper shipping name

Transport by land according to ADR/RID	Coating solution
- Classification Code	F1
- Label	
- ADR LQ	5 l
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 3 (D/E)
Inland navigation (ADN)	Coating solution
- Classification Code	F1
- Label	
Marine transport in accordance with IMDG	Coating solution
- EMS	F-E, S-E
- Label	
- IMDG LQ	5 l
Air transport in accordance with IATA	Coating solution
- Label	
DOT Road Shipment Information (49 CFR)	UN/NA 1139 Coating solution 3 III
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	3
Inland navigation (ADN)	3
Marine transport in accordance with IMDG	3
Air transport in accordance with IATA	3
DOT Road Shipment Information (49 CFR)	3

14.4 Packing group

Transport by land according to ADR/RID	III
Inland navigation (ADN)	III
Marine transport in accordance with IMDG	III
Air transport in accordance with IATA	III
DOT Road Shipment Information (49 CFR)	III

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
DOT Road Shipment Information (49 CFR)	No

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

Not applicable

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	This product does not contain any ingredients regulated under this list.
- SARA, 311	This product does not contain any ingredients regulated under this list.
- SARA, 313	This product does not contain any ingredients regulated under this list.
- CA Proposition 65	No chemical substances in this material are named on the California P65 list.
- TSCA	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.
- FDA	Not applicable
American Conference of Governmental Industrial Hygienists - ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcino-gen by ACGIH.
International Agency for Research on Cancer IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
National Toxicology Program - NTP	Ingredients not listed.
HAP-VOC	59 %
Transport-regulations	DOT-Classification, ADR (2025); IMDG-Code (2025, 42. Amdt.); IATA-DGR (2025)

15.2 Chemical safety assessment

Not applicable

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

NFPA Ratings



TOP, FLAMMABILITY: 3 - Severe Hazard
LEFT, HEALTH: 2 - Moderate Hazard
RIGHT, REACTIVITY: 0 - Minimal Hazard
BOTTOM, SPECIAL NOTICE: FLL - Flammable Liquid

HMIS Ratings

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

2 - Moderate Hazard
3 - Severe Hazard
0 - Minimal Hazard
X - Personal protection rating to be supplied by user depending on use conditions

PERSONAL PROTECTION:

A - Safety Glasses
B - Safety Glasses and Gloves
C - Safety Glasses, Gloves and Protection Apron
D - Face Shield, Gloves and Protection Apron
E - Safety Glasses, Gloves and Dust Respirator
F - Safety Glasses, Gloves, Protection Apron and Dust Respirator
G - Safety Glasses, Gloves and Vapor Respirator.
H - Splash Goggles, Gloves, Protection Apron and Vapor Respirator.
I - Safety Glasses, Gloves, Dust Respirator and Vapor Respirator.
J - Splash Goggles, Gloves, Protection Apron, Dust Respirator and Vapor Respirator.
K - Airline Mask or Hood, Gloves, Full Suit and Boots.
X - Personal protection rating to be supplied by user depending on use conditions

Modified position None

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