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

1.1 Product identifier

FIRESHIELD 920 KS Hardener

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

1.2.1 Relevant uses

Fire retardant coating

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Fireshield, a division of Fire Protection Coatings Limited
Level 1, 60 Cashel Street
8013 Christchurch / NEW ZEALAND
Phone 0800 FIRESHIELD (0800 347374)
Homepage www.fireshieldcoatings.com
E-mail info@fireshieldcoatings.com

Address enquiries to

Technical information info@fireshieldcoatings.com

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 National Poison Centre (New Zealand): 0800 764 766 (24 hours)

SECTION 2: Hazards identification

Approval
This product is considered to be a hazardous substance to the Hazardous Substances and New Organisms Act (HSNO).
Surface Coatings and Colourants (Corrosive, Carcinogenic) Group Standard 2020 - HSR002660 (consolidated and current)

Hazard classifications
skin corrosion Category 1C
Serious eye damage Category 1
Skin sensitisation Category 1
reproductive toxicity Category 2
Hazardous to the aquatic environment acute Category 1
Hazardous to the aquatic environment acute Category 1
carcinogenicity Category 2

Hazard pictograms


Signal word
DANGER

Hazard statements
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H361f Suspected of damaging fertility.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements
P201 Obtain special instructions before use.
P260 Do not breathe vapours / spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / protective clothing / eye protection / face 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.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P310 Immediately call a POISON CENTER / doctor.
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

Other Classifications
There are no other Classifications that are known to apply.

SECTION 3: Composition / Information on ingredients

3.1 Substances
not applicable

3.2 Mixtures
The product is a mixture.

Range [%]	Substance
30 - 50	Fatty acids, C18-unsatd., reaction products with tetraethylenepentamine
	CAS: 1226892-45-0
1 - 10	Melamine
	CAS: 108-78-1
3 - 10	2,4,6-tris(dimethylaminomethyl)phenol
	CAS: 90-72-2
< 1	Amines, polyethylenepoly-, tetraethylenepentamine fraction
	CAS: 90640-66-7

Comment on component parts For full text of H-statements: see SECTION 16.

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.
Seek medical advice immediately.

Skin contact
In case of contact with skin wash off immediately with soap and water.
Immediate medical treatment necessary, as untreated burns can result in slow-healing wounds.

Eye contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Consult a doctor immediately.

Ingestion
Consult a doctor immediately.
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions
Product is caustic.

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
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.

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

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

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

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.
Provide suitable vacuuming at the processing area.

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

7.2 Conditions for safe storage, including any incompatibilities

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.
Keep in a cool place. Store in a dry place.

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 (NZ)

not applicable

DNEL

Substance
2,4,6-tris(dimethylaminomethyl)phenol, CAS: 90-72-2
Industrial, inhalative, Long-term - systemic effects, 0,53 mg/m³
Industrial, inhalative, Acute - systemic effects, 2,1 mg/m³
Industrial, dermal, Long-term - systemic effects, 0,15 mg/kg bw/day
Industrial, dermal, Acute - systemic effects, 0,6 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 0,13 mg/m³
general population, inhalative, Acute - systemic effects, 0,13 mg/m³
general population, dermal, Long-term - systemic effects, 0,075 mg/kg bw/day
general population, dermal, Acute - systemic effects, 0,075 mg/kg bw/day
general population, oral, Long-term - systemic effects, 0,075 mg/kg bw/day
Melamine, CAS: 108-78-1
Industrial, dermal, Acute - systemic effects, 117 mg/kg
Industrial, inhalative, Acute - systemic effects, 82,3 mg/m³
Industrial, inhalative, Long-term - systemic effects, 8,3 mg/m³
Industrial, dermal, Long-term - systemic effects, 11,8 mg/kg
general population, inhalative, Long-term - systemic effects, 1,5 mg/m³
general population, dermal, Long-term - systemic effects, 4,2 mg/kg
general population, oral, Long-term - systemic effects, 0,42 mg/kg
Fatty acids, C18-unsatd., reaction products with tetraethylenepentamine, CAS: 1226892-45-0
Industrial, inhalative, Long-term - systemic effects, 9,87 mg/m³
Industrial, dermal, Long-term - systemic effects, 1,4 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 1,74 mg/m³
general population, dermal, Long-term - systemic effects, 0,5 mg/kg bw/day
general population, oral, Long-term - systemic effects, 0,5 mg/kg bw/day
Amines, polyethylenepoly-, tetraethylenepentamine fraction, CAS: 90640-66-7
Industrial, inhalative, Long-term - systemic effects, 0,82 mg/m³
Industrial, dermal, Long-term - local effects, 0,25 mg/cm²
general population, dermal, Long-term - local effects, 20,8 µg/cm²
general population, oral, Long-term - systemic effects, 0,21 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 0,14 mg/m³

PNEC

Substance
2,4,6-tris(dimethylaminomethyl)phenol, CAS: 90-72-2
freshwater, 0,046 mg/L
seawater, 0,005 mg/L
sewage treatment plants (STP), 0,2 mg/L
sediment (freshwater), 0,262 mg/kg sediment dw
sediment (seaater), 0,026 mg/kg sediment dw
soil, 0,025 mg/kg soil dw
Melamine, CAS: 108-78-1
freshwater, 0,51 mg/L
seawater, 0,051 mg/L
sediment (freshwater), 2,524 mg/kg sediment dw
sediment (seaater), 0,252 mg/kg sediment dw
soil, 0,206 mg/kg soil dw
sewage treatment plants (STP), 200 mg/L

Fatty acids, C18-unsatd., reaction products with tetraethylenepentamine, CAS: 1226892-45-0
freshwater, 30,7 µg/L
seawater, 3,07 µg/L
sewage treatment plants (STP), 2,3 mg/L
sediment (freshwater), 119,8 mg/kg
sediment (seaater), 11,98 mg/kg
soil, 9,44 mg/kg
oral (food), 20 mg/kg
Amines, polyethylenepoly-, tetraethylenepentamine fraction, CAS: 90640-66-7
freshwater, 0,01 mg/L
seawater, 0,001 mg/L
sewage treatment plants (STP), 4,6 mg/L
sediment (freshwater), 3,198 mg/kg sediment dw
sediment (seaater), 0,32 mg/kg sediment dw
soil, 2,5 mg/kg soil dw

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
0,4mm Butyl 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.
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 breathe vapour/spray.
Avoid contact during pregnancy/while nursing.

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
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	white
Odor	characteristic
Odour threshold	not applicable
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point or initial boiling point and boiling range [°C]	not determined
Flash point [°C]	not applicable
Flammability	no
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/cm³]	1,25 - 1,38 (20 °C / 68,0 °F)
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	insoluble
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	not determined
Kinematic viscosity	14000 - 24000 mPas (20°C)
Relative vapour density	not determined
Melting point [°C]	not determined
Auto-ignition temperature [°C]	not applicable
Decomposition temperature [°C]	not determined
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

The product is stable under standard conditions.

10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents, strong acids and alkalies.

10.4 Conditions to avoid

See SECTION 7

10.5 Incompatible materials

Oxidizing agent
Acids
Alkalies

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
2,4,6-tris(dimethylaminomethyl)phenol, CAS: 90-72-2
LD50, oral, Rat, 2169 mg/kg OECD TG 401
Melamine, CAS: 108-78-1
LD50, oral, Rat (female), 3828 mg/kg
LD50, oral, Rat (male), 3161 mg/kg
Fatty acids, C18-unsatd., reaction products with tetraethylenepentamine, CAS: 1226892-45-0
LD50, oral, Rat (female), 2500 mg/kg
Amines, polyethylenepoly-, tetraethylenepentamine fraction, CAS: 90640-66-7
LD50, oral, Rat, 1716 mg/kg

Acute dermal toxicity

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

Substance
Melamine, CAS: 108-78-1
LD50, dermal, Rat, > 2000 mg/kg
Amines, polyethylenepoly-, tetraethylenepentamine fraction, CAS: 90640-66-7
LD50, dermal, Rabbit, 1260 mg/kg

Acute inhalational toxicity

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

Substance
Melamine, CAS: 108-78-1
LC50, inhalative, Rat, 5,19 mg/l, OECD 403, 4h

Serious eye damage/irritation

Product is caustic.
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Calculation method

Substance
2,4,6-tris(dimethylaminomethyl)phenol, CAS: 90-72-2
Eye, corrosive
Melamine, CAS: 108-78-1
Eye, non-irritating
Fatty acids, C18-unsatd., reaction products with tetraethylenepentamine, CAS: 1226892-45-0
Eye, corrosive
Amines, polyethylenepoly-, tetraethylenepentamine fraction, CAS: 90640-66-7
Eye, corrosive

Skin corrosion/irritation

Product is caustic.
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Calculation method

Substance
2,4,6-tris(dimethylaminomethyl)phenol, CAS: 90-72-2

dermal, corrosive
Melamine, CAS: 108-78-1
Rabbit, OECD 404, non-irritating
Fatty acids, C18-unsatd., reaction products with tetraethylenepentamine, CAS: 1226892-45-0
dermal, corrosive
Amines, polyethylenepoly-, tetraethylenepentamine fraction, CAS: 90640-66-7
dermal, corrosive

Respiratory or skin sensitisation

May cause an allergic skin reaction.
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Calculation method

Substance
2,4,6-tris(dimethylaminomethyl)phenol, CAS: 90-72-2
dermal, non-sensitizing
Melamine, CAS: 108-78-1
Guinea pig, OECD 406, non-sensitizing
inhalative, non-sensitizing
Fatty acids, C18-unsatd., reaction products with tetraethylenepentamine, CAS: 1226892-45-0
dermal, sensitising
Amines, polyethylenepoly-, tetraethylenepentamine fraction, CAS: 90640-66-7
dermal, sensitising

Specific target organ toxicity — single exposure

Does not contain a relevant substance that meets the classification criteria.
Based on the available information, the classification criteria are not fulfilled.
Toxicological data of complete product are not available.

Specific target organ toxicity — repeated exposure

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

Substance
2,4,6-tris(dimethylaminomethyl)phenol, CAS: 90-72-2
NOAEL, oral, Rat, 15 mg/kg bw/day (subchronic), The effects observed are not sufficient for classification.
Melamine, CAS: 108-78-1
NOAEL, oral, Rat, 72 mg/kg bw/day (subchronic), adverse effect observed
Fatty acids, C18-unsatd., reaction products with tetraethylenepentamine, CAS: 1226892-45-0
NOAEL, oral, Rat, 300 mg/kg bw/day (subacute), no adverse effect observed
Amines, polyethylenepoly-, tetraethylenepentamine fraction, CAS: 90640-66-7
NOAEL, dermal, Rabbit, 200 mg/kg bw/day (subacute), no adverse effect observed

Mutagenicity

Does not contain a relevant substance that meets the classification criteria.
Based on the available information, the classification criteria are not fulfilled.
Toxicological data of complete product are not available.

Substance
2,4,6-tris(dimethylaminomethyl)phenol, CAS: 90-72-2
in vitro, no adverse effect observed
Melamine, CAS: 108-78-1
in vitro, negativ
in vivo, negativ
Fatty acids, C18-unsatd., reaction products with tetraethylenepentamine, CAS: 1226892-45-0
in vitro, no adverse effect observed
Amines, polyethylenepoly-, tetraethylenepentamine fraction, CAS: 90640-66-7
in vitro, The effects observed are not sufficient for classification.
in vivo, no adverse effect observed

Reproduction toxicity

Suspected of damaging fertility.
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Calculation method

- Fertility

Substance
2,4,6-tris(dimethylaminomethyl)phenol, CAS: 90-72-2
NOAEL, Rat, 150 mg/kg bw/day (subchronic), no adverse effect observed
Melamine, CAS: 108-78-1
NOAEL, oral, Rat, 89 mg/kg bw/day (subchronic), adverse effect observed
Fatty acids, C18-unsatd., reaction products with tetraethylenepentamine, CAS: 1226892-45-0
NOAEL, oral, Rat, 300 mg/kg bw/day (subacute), no adverse effect observed
Amines, polyethylenepoly-, tetraethylenepentamine fraction, CAS: 90640-66-7
NOAEL, oral, Rat, 400 mg/kg bw/day (subacute), no adverse effect observed
NOAEL, dermal, Rabbit, 125 mg/kg bw/day (subacute), no adverse effect observed

- Development

Substance
2,4,6-tris(dimethylaminomethyl)phenol, CAS: 90-72-2
NOAEL, Rat, 150 mg/kg bw/day (subchronic), no adverse effect observed
Melamine, CAS: 108-78-1
NOAEL, oral, Rabbit, 150 mg/kg bw/day (subacute), no adverse effect observed
Fatty acids, C18-unsatd., reaction products with tetraethylenepentamine, CAS: 1226892-45-0
NOAEL, oral, Rat, 300 mg/kg bw/day (subacute), no adverse effect observed
Amines, polyethylenepoly-, tetraethylenepentamine fraction, CAS: 90640-66-7
NOAEL, oral, Rat, 400 mg/kg bw/day (subacute), no adverse effect observed
NOAEL, dermal, Rabbit, 125 mg/kg bw/day (subacute), no adverse effect observed

Carcinogenicity

Based on the available information, the classification criteria are fulfilled.
Suspected of causing cancer.
Toxicological data of complete product are not available.

Substance
Melamine, CAS: 108-78-1
LOAEL, oral, Rat, 126 mg/kg bw/day (chronic), adverse effect observed

Aspiration hazard

Does not contain a relevant substance that meets the classification criteria.
Based on the available information, the classification criteria are not fulfilled.

General remarks

none

SECTION 12: Ecological information

12.1 Toxicity

Substance
2,4,6-tris(dimethylaminomethyl)phenol, CAS: 90-72-2
LC50, (96h), Cyprinus carpio, 175 mg/l
EC50, (72h), Desmodesmus subspicatus, 84 mg/l OECD TG 201
NOEC, (72h), Desmodesmus subspicatus, 6,25 mg/l OECD TG 201
Melamine, CAS: 108-78-1
LC50, (96h), Oncorhynchus kisutch, > 3000 mg/L
EC50, (48h), Daphnia magna, 200 mg/L EPA OPP 72-2
NOEC, (21d), Daphnia magna, >= 11 mg/L OECD 211
ErC50, (96h), Pseudokirchneriella subcapitata, 325 mg/L PRO/FT Algae-AC090-6
Fatty acids, C18-unsatd., reaction products with tetraethylenepentamine, CAS: 1226892-45-0
LC50, (96h), Danio rerio, 0,19 mg/L OECD TG 203
EC50, (48h), Daphnia magna, 0,18 mg/L OECD TG 202
EC50, (72h), Pseudokirchneriella subcapitata, 0,638 mg/L OECD TG 201
Amines, polyethylenepoly-, tetraethylenepentamine fraction, CAS: 90640-66-7
LC50, (96h), Fish, 420 mg/L (ECHA)
EC10, (21d), Fish, 1,9 mg/L (ECHA)
ErC50, (72h), Algae, 24,1 mg/L (ECHA)

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

Restrictions	There are no product-specific restrictions. However, state and local disposal regulations may apply.
Disposal method	Disposal of this product must comply with the requirements of state and local disposal regulations.
Contaminated packaging	Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	2735
Air transport in accordance with IATA	2735

14.2 UN proper shipping name

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	Amines, liquid, corrosive, n.o.s. (Fatty acids C18 unsat, reaction products with tetraethylenepentamine, 2,4,6-Tris(dimethylaminomethyl)phenol)
- EMS	F-A, S-B
- Label	
- IMDG LQ	5 l
Air transport in accordance with IATA	Amines, liquid, corrosive, n.o.s. (Fatty acids C18 unsat, reaction products with tetraethylenepentamine, 2,4,6-Tris(dimethylaminomethyl)phenol)
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	8
Air transport in accordance with IATA	8

14.4 Packing group

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

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

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

This product is considered to be a hazardous substance to the Hazardous Substances and New Organisms Act (HSNO).
Surface Coatings and Colourants (Corrosive, Carcinogenic) Group Standard 2020 - HSR002660 (consolidated and current)

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

MSDS	The content and format of this Safety-Data-Sheet is in accordance with HSNO Approved Code of Practice.
Labelling	No removal of labels and/or decanting of product into other containers can occur.
Emergency plan	No information available.
Approved handler	No information available.
Tracking	No information available.
Bunding & secondary containment	No information available.
Signage	No information available.
Location test certificate	No information available.
Flammable zone	No information available.
Fire extinguisher	No information available.
Note:	Group Standard conditions that must be met: Surface Coatings and Colourants (Corrosive, Carcinogenic) Group Standard 2020 HSR002660 (consolidated and current), Schedule 1
Other Legislation	In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.

SECTION 16: Other information

16.1 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
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

16.2 Other information

Classification procedure

skin corrosion Category 1C: H314 Causes severe skin burns and eye damage. (Calculation method)
Serious eye damage Category 1: H318 Causes serious eye damage. (Calculation method)
Skin sensitisation Category 1: H317 May cause an allergic skin reaction. (Calculation method)
reproductive toxicity Category 2: H361f Suspected of damaging fertility. (Calculation method)
Hazardous to the aquatic environment acute Category 1: H400 Very toxic to aquatic life. (Calculation method)
Hazardous to the aquatic environment acute Category 1: H410 Very toxic to aquatic life with long lasting effects. (Calculation method)
carcinogenicity Category 2: H351 Suspected of causing cancer. (Calculation method)

Modified position

none