MOLY-MIST™

Safety Data Sheet

according to the Hazardous Substances and New Organisms Act (1996)
Issue date: 17/03/2022 Revision date: 17/03/2022 Supersedes: 17/03/2022 Version: 1.2

SECTION 1: Identification

1.1 Product identifier

Trade name : MOLY-MIST™
Product form : Mixture

1.2 Other means of identification

No additional information available

1.3 Recommended use of the chemical and restrictions on use

No additional information available

1.4 Details of manufacturer or importer

Manufacturer
Whitmore Manufacturing LLC
930 Whitmore Drive
Rockwall, Texas 75087
USA
T 1.972.771.1000
Regulatory@whitmores.com - www.jetlube.com

Distributor
Blick
21 Kahu Crescent Te Rapa Park
Hamilton 3200
New Zealand
T +64 7-849 2366
www.blick.group

1.5. Emergency phone number

Emergency number : For Chemical Emergency Call CHEMTREC 24hr/day 7days/week
Within USA and Canada: 1.800.424.9300
Outside USA and Canada: +1.703.527.3887
(collect calls accepted)

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the Environmental Protection Authority notices (EPA Hazardous Substances and New Organisms Act 1996)

Flammable liquids, Category 1	H224
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, category 1A	H317
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412

2.2. GHS Label elements, including precautionary statements

GHS NZ labelling

Hazard pictograms (GHS NZ) :

Signal word (GHS NZ) : Danger
Contains : acetone (40.49 %); Methyl ethyl ketone (24.74 %); cobalt(II) 2-ethylhexanoate (0.1885 – 0.2175 %)
Hazard statements (GHS NZ) : H224 - Extremely flammable liquid and vapour
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H412 - Harmful to aquatic life with long lasting effects
Prevention : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground and bond container and receiving equipment.
P241 - Use explosion-proof equipment.

		P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash hands, forearms and face thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area. P272 - Contaminated work clothing should not be allowed out of the workplace. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
Response	:	P302+P352 - IF ON SKIN: Wash with plenty of water. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 - Call a POISON CENTER or doctor if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P332+P313 - If skin irritation occurs: Get medical advice/attention. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use media other than water to extinguish.
Storage	:	P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up.
Disposal	:	P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to GHS NZ
acetone	CAS-No.: 67-64-1	40.49	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Methyl ethyl ketone	CAS-No.: 78-93-3	24.74	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Xylene	CAS-No.: 1330-20-7	10.80477	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Ethylbenzene	CAS-No.: 100-41-4	0.75213	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:vapour), H332 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
toluene	CAS-No.: 108-88-3	0.4494	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 3, H412
cobalt(II) 2-ethylhexanoate	CAS-No.: 136-52-7	0.1885 – 0.2175	Eye Irrit. 2, H319 Skin Sens. 1A, H317 Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	%	Classification according to GHS NZ
cyclohexane	CAS-No.: 110-82-7	0.0899 – 0.1189	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 3, H412

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after 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.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Symptoms caused by exposure

Symptoms/effects : May cause drowsiness or dizziness.
Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Eye irritation.

4.3. Medical attention and special treatment

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

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

5.2. Specific hazards arising from the chemical

Fire hazard : Extremely flammable liquid and vapour.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

Emergency procedures : Exercise caution. Spill area may be slippery. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

acetone (67-64-1)	
New Zealand - Occupational Exposure Limits	
Local name	Acetone
WES-TWA (OEL TWA) [1]	1185 mg/m³
WES-TWA (OEL TWA) [2]	500 ppm
WES-STEL (OEL STEL)	2375 mg/m³
WES-STEL (OEL STEL) [ppm]	1000 ppm
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
New Zealand - Biological Exposure Indices	
Local name	Acetone
BEI	50 mg/l Parameter: Acetone - Medium: Urine - Sampling time: End of shift
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition

Methyl ethyl ketone (78-93-3)	
New Zealand - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK, 2-Butanone)
WES-TWA (OEL TWA) [1]	445 mg/m³
WES-TWA (OEL TWA) [2]	150 ppm
WES-STEL (OEL STEL)	890 mg/m³
WES-STEL (OEL STEL) [ppm]	300 ppm
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
New Zealand - Biological Exposure Indices	
Local name	Methyl ethyl ketone (MEK)
BEI	2 mg/l Parameter: MEK - Medium: Urine - Sampling time: End of shift
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition

Xylene (1330-20-7)	
New Zealand - Occupational Exposure Limits	
Local name	Xylene (Dimethylbenzene)
WES-TWA (OEL TWA) [1]	217 mg/m³
WES-TWA (OEL TWA) [2]	50 ppm

Xylene (1330-20-7)	
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
New Zealand - Biological Exposure Indices	
Local name	Xylene
BEI	1.5 g/l Parameter: Methylhippuric acid - Medium: Urine - Sampling time: End of shift
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition

Ethylbenzene (100-41-4)	
New Zealand - Occupational Exposure Limits	
Local name	Ethyl benzene
WES-TWA (OEL TWA) [1]	434 mg/m³
WES-TWA (OEL TWA) [2]	100 ppm
WES-STEL (OEL STEL)	543 mg/m³
WES-STEL (OEL STEL) [ppm]	125 ppm
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
New Zealand - Biological Exposure Indices	
Local name	Ethyl benzene
BEI	0.25 g/g creatinine Parameter: Sum of mandelic acid and phenylglyoxylic acids - Medium: Urine - Sampling time: End of shift or end of exposure
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition

toluene (108-88-3)	
New Zealand - Occupational Exposure Limits	
Local name	Toluene (Toluol)
WES-TWA (OEL TWA) [1]	188 mg/m³
WES-TWA (OEL TWA) [2]	50 ppm
Remark (NZ)	skin (Skin absorption)
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
New Zealand - Biological Exposure Indices	
Local name	Toluene
BEI	0.03 mg/l Parameter: Toluene - Medium: Urine - Sampling time: End of exposure or end of shift 0.3 mg/g creatinine Parameter: o-Cresol (following hydrolysis) - Medium: Urine - Sampling time: End of exposure or end of shift
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition

cyclohexane (110-82-7)	
New Zealand - Occupational Exposure Limits	
Local name	Cyclohexane
WES-TWA (OEL TWA) [1]	350 mg/m³
WES-TWA (OEL TWA) [2]	100 ppm
WES-STEL (OEL STEL)	1050 mg/m³
WES-STEL (OEL STEL) [ppm]	300 ppm
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition

Exposure limit values for the other components

No additional information available

8.2. Monitoring methods

No additional information available

8.3. Engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Hand protection :

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	6 (> 480 minutes)	> 0.6 mm		

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

Physical state : Liquid
Appearance : Liquid.
Colour : Black
Odour : aromatic
Odour threshold : No additional information available
pH : No additional information available
Evaporation rate : No additional information available
Relative evaporation rate (butylacetate=1) : No data available
Melting point / Freezing point : Melting point: Not applicable
Boiling point : No data available
Flash point : < 0 °C
Auto-ignition temperature : No data available
Flammability (solid, gas) : Not applicable
Vapour pressure : No additional information available
Relative density : No additional information available
Density : No additional information available
Solubility : insoluble in water.
Partition coefficient n-octanol/water (Log Pow) : No data available
Viscosity, kinematic : > 22 mm²/s
Viscosity, dynamic : No data available
Explosive properties : No data available
Explosive limits : No additional information available
Minimum ignition energy : No data available

SECTION 10: Stability and reactivity

Reactivity : Extremely flammable liquid and vapour.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : No dangerous reactions known under normal conditions of use.
Conditions to avoid : Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.
Incompatible materials : No additional information available
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Toxicity

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

acetone (67-64-1)	
LD50 oral rat	5800 mg/kg bodyweight Animal: rat, Animal sex: female
LD50 dermal rabbit	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal)
LC50 Inhalation - Rat	76 mg/l air Animal: rat, Animal sex: female, 95% CL: 65,2 - 88,4
LC50 Inhalation - Rat (Vapours)	76 mg/l Source: ECHA

Methyl ethyl ketone (78-93-3)	
LD50 oral rat	2193 mg/kg bodyweight (Equivalent or similar to OECD 423, Rat, Male / female, Read-across, Oral)
LD50 dermal rabbit	> 10 ml/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Male, Experimental value, Dermal)
LC50 Inhalation - Rat (Vapours)	34.5 mg/l/4h

Xylene (1330-20-7)	
LD50 oral rat	3523 mg/kg bodyweight (Equivalent or similar to EU Method B.1: Acute Toxicity (Oral), Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male
LD50 dermal	1700 mg/kg
LC50 Inhalation - Rat (Vapours)	27.57 mg/l/4h

Ethylbenzene (100-41-4)	
LD50 oral rat	3500 mg/kg (Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	15432 mg/kg bodyweight (24 h, Rabbit, Male, Experimental value, Dermal)
LC50 Inhalation - Rat	17.8 mg/l (4 h, Rat, Male, Experimental value, Inhalation (vapours))

toluene (108-88-3)	
LD50 oral rat	5580 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EU Method B.1 (Acute Toxicity (Oral)), 95% CL: 5300 - 5910
LD50 oral	5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male, 95% CL: 9,63 - 20,77
LC50 Inhalation - Rat	25.7 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male, Experimental value, Inhalation (vapours))
LC50 Inhalation - Rat (Vapours)	12.5 mg/l/4h

cobalt(II) 2-ethylhexanoate (136-52-7)	
LD50 oral rat	3129 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), 95% CL: 1750 - 5000
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 2000 mg/kg

cyclohexane (110-82-7)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 32.88 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified.
STOT-single exposure : May cause drowsiness or dizziness.

acetone (67-64-1)	
STOT-single exposure	May cause drowsiness or dizziness.

Methyl ethyl ketone (78-93-3)	
STOT-single exposure	May cause drowsiness or dizziness.

toluene (108-88-3)	
STOT-single exposure	May cause drowsiness or dizziness.

cyclohexane (110-82-7)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified

Xylene (1330-20-7)	
LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)

Ethylbenzene (100-41-4)	
NOAEL (oral, rat, 90 days)	75 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

toluene (108-88-3)	
LOAEL (oral, rat, 90 days)	1250 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	625 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	2.355 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)

Aspiration hazard : Not classified

MOLY-MIST™	
Viscosity, kinematic	> 22 mm²/s

SECTION 12: Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

Soil toxicity : Not classified

Terrestrial vertebrate toxicity : Not classified

Terrestrial invertebrate toxicity : Not classified

acetone (67-64-1)	
LC50 - Fish [1]	5540 mg/l (EU Method C.1, 96 h, Salmo gairdneri, Static system, Fresh water, Experimental value, Nominal concentration)
LOEC (chronic)	> 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	≥ 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
BCF - Fish [1]	0.69 (Pisces)
BCF - Other aquatic organisms [1]	3 (BCFWIN, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	-0.24 (Test data)
LD50 dermal rabbit	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal)
LD50 oral rat	5800 mg/kg bodyweight Animal: rat, Animal sex: female

Methyl ethyl ketone (78-93-3)	
LC50 - Fish [1]	2993 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	308 mg/l Test organisms (species): Daphnia magna
ErC50 algae	1972 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	1972 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

Methyl ethyl ketone (78-93-3)	
ErC50 algae	1972 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC chronic algae	93 mg/l
Partition coefficient n-octanol/water (Log Pow)	0.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 40 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.53 (log Koc, Calculated value)
LD50 dermal rabbit	> 10 ml/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Male, Experimental value, Dermal)
LD50 oral rat	2193 mg/kg bodyweight (Equivalent or similar to OECD 423, Rat, Male / female, Read-across, Oral)

Xylene (1330-20-7)	
LC50 - Fish [1]	3.3 mg/l
EC50 - Crustacea [1]	7.4 mg/l
ErC50 algae	4.36 mg/l (OECD 201: Alga, Growth Inhibition Test, 73 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	3.2 – 4.9 mg/l (Selenastrum capricornutum, Growth)
ErC50 algae	4.36 mg/l (OECD 201: Alga, Growth Inhibition Test, 73 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'
BCF - Fish [1]	7.2 – 25.9 (56 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across)
BCF - Fish [2]	14.1 – 15 (Carassius auratus)
Partition coefficient n-octanol/water (Log Pow)	3.2 (Read-across, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.73 (log Koc, Equivalent or similar to OECD 121, Read-across)
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male
LD50 oral rat	3523 mg/kg bodyweight (Equivalent or similar to EU Method B.1: Acute Toxicity (Oral), Rat, Male, Experimental value, Oral, 14 day(s))

Ethylbenzene (100-41-4)	
LC50 - Fish [1]	3.7 mg/l
EC50 - Crustacea [1]	0.42 mg/l
EC50 72h - Algae [1]	4.9 mg/l Test organisms (species): Skeletonema costatum
EC50 72h - Algae [2]	5.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	1.7 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
NOEC (chronic)	0.96 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
NOEC chronic crustacea	0.956 mg/l
BCF - Fish [1]	1 – 2.4 (Other, 6 week(s), Oncorhynchus kisutch, Flow-through system, Salt water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	3.6 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.71 (log Koc, PCKOCWIN v1.66, QSAR)
LD50 dermal rabbit	15432 mg/kg bodyweight (24 h, Rabbit, Male, Experimental value, Dermal)
LD50 oral rat	3500 mg/kg (Rat, Male / female, Experimental value, Oral)

toluene (108-88-3)	
LC50 - Fish [1]	5.5 mg/l Test organisms (species): Oncorhynchus kisutch
EC50 - Crustacea [1]	3.78 mg/l

toluene (108-88-3)	
LOEC (chronic)	2.76 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
NOEC (chronic)	0.74 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
NOEC chronic fish	1.39 mg/l Test organisms (species): Oncorhynchus kisutch Duration: '40 d'
NOEC chronic crustacea	0.74 mg/l
BCF - Fish [1]	90 (72 h, Leuciscus idus, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	2.73 (Experimental value, 20 °C)
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male, 95% CL: 9,63 - 20,77
LD50 oral rat	5580 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EU Method B.1 (Acute Toxicity (Oral)), 95% CL: 5300 - 5910

cobalt(II) 2-ethylhexanoate (136-52-7)	
LC50 - Fish [1]	1.512 mg/l (ASTM, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across)
LC50 - Fish [2]	54.1 mg/l (ASTM, 96 h, Pimephales promelas, Flow-through system, Fresh water, Read-across)
EC50 - Other aquatic organisms [1]	1703 mg/kg dwt (ASTM, 28 day(s), Tubifex tubifex, Semi-static system, Fresh water, Read-across, Reproduction)
ErC50 algae	144 µg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Read-across, GLP)
ErC50 algae	144 µg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Read-across, GLP)
BCF - Fish [1]	1.2 (131 day(s), Seriola quinqueradiata, Static system, Salt water, Read-across, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	2.96 Source: ECHA
	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 oral rat	3129 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), 95% CL: 1750 - 5000

cyclohexane (110-82-7)	
LC50 - Fish [1]	4.53 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	0.9 mg/l
ErC50 algae	9.317 mg/l (Equivalent or similar to OECD 201, 72 h, Pseudokirchneriella subcapitata, Experimental value, GLP)
EC50 72h - Algae [1]	3.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	9.317 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	9.317 mg/l (Equivalent or similar to OECD 201, 72 h, Pseudokirchneriella subcapitata, Experimental value, GLP)
NOEC chronic algae	0.94 mg/l
BCF - Fish [1]	167 (Pimephales promelas, QSAR)
Partition coefficient n-octanol/water (Log Pow)	3.44 (Experimental value, Other, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.89 (log Koc, QSAR)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

12.2. Persistence and degradability

MOLY-MIST™	
Persistence and degradability	No additional information available

acetone (67-64-1)	
Not rapidly degradable	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.43 g O_2/g substance
Chemical oxygen demand (COD)	1.92 g O_2/g substance
ThOD	2.2 g O_2/g substance
BOD (% of ThOD)	0.872 (20 day(s), Literature study)

Methyl ethyl ketone (78-93-3)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	2.03 g O_2/g substance
Chemical oxygen demand (COD)	2.31 g O_2/g substance
ThOD	2.44 g O_2/g substance

Xylene (1330-20-7)	
Not rapidly degradable	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.4 – 2.53 g O_2/g substance
Chemical oxygen demand (COD)	2.56 – 2.91 g O_2/g substance
ThOD	3.1 g O_2/g substance
BOD (% of ThOD)	0.44 – 0.816

Ethylbenzene (100-41-4)	
Not rapidly degradable	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.44 g O_2/g substance
Chemical oxygen demand (COD)	2.1 g O_2/g substance
ThOD	3.17 g O_2/g substance

toluene (108-88-3)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	2.15 g O_2/g substance
Chemical oxygen demand (COD)	2.52 g O_2/g substance
ThOD	3.13 g O_2/g substance
BOD (% of ThOD)	0.69

cobalt(II) 2-ethylhexanoate (136-52-7)	
Not rapidly degradable	
Persistence and degradability	Readily biodegradable in water.

cyclohexane (110-82-7)	
Persistence and degradability	Non degradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.22 g O_2/g substance
ThOD	3.425 g O_2/g substance

12.3. Bioaccumulative potential

MOLY-MIST™	
Bioaccumulative potential	No additional information available
acetone (67-64-1)	
BCF - Fish [1]	0.69 (Pisces)
BCF - Other aquatic organisms [1]	3 (BCFWIN, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	-0.24 (Test data)
Bioaccumulative potential	Not bioaccumulative.
Methyl ethyl ketone (78-93-3)	
Partition coefficient n-octanol/water (Log Pow)	0.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 40 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.53 (log Koc, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Xylene (1330-20-7)	
BCF - Fish [1]	7.2 – 25.9 (56 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across)
BCF - Fish [2]	14.1 – 15 (Carassius auratus)
Partition coefficient n-octanol/water (Log Pow)	3.2 (Read-across, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.73 (log Koc, Equivalent or similar to OECD 121, Read-across)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
Ethylbenzene (100-41-4)	
BCF - Fish [1]	1 – 2.4 (Other, 6 week(s), Oncorhynchus kisutch, Flow-through system, Salt water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	3.6 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.71 (log Koc, PCKOCWIN v1.66, QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
toluene (108-88-3)	
BCF - Fish [1]	90 (72 h, Leuciscus idus, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	2.73 (Experimental value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
cobalt(II) 2-ethylhexanoate (136-52-7)	
BCF - Fish [1]	1.2 (131 day(s), Seriola quinqueradiata, Static system, Salt water, Read-across, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	2.96 Source: ECHA
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
cyclohexane (110-82-7)	
BCF - Fish [1]	167 (Pimephales promelas, QSAR)
Partition coefficient n-octanol/water (Log Pow)	3.44 (Experimental value, Other, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.89 (log Koc, QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

MOLY-MIST™	
Mobility in soil	No additional information available
acetone (67-64-1)	
Surface tension	0.0237 N/m
Partition coefficient n-octanol/water (Log Pow)	-0.24 (Test data)
Ecology - soil	No (test)data on mobility of the substance available.
Methyl ethyl ketone (78-93-3)	
Surface tension	0.024 N/m (20 °C)
Partition coefficient n-octanol/water (Log Pow)	0.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 40 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.53 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil. Slightly harmful to plants.
Xylene (1330-20-7)	
Mobility in soil	537 Source: ECHA
Surface tension	28.01 – 29.76 mN/m (25 °C)
Partition coefficient n-octanol/water (Log Pow)	3.2 (Read-across, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.73 (log Koc, Equivalent or similar to OECD 121, Read-across)
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.
Ethylbenzene (100-41-4)	
Surface tension	0.071 N/m (23 °C, 0.0582 g/l, EU Method A.5: Surface tension)
Partition coefficient n-octanol/water (Log Pow)	3.6 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.71 (log Koc, PCKOCWIN v1.66, QSAR)
Ecology - soil	Low potential for adsorption in soil. Toxic to soil organisms.
toluene (108-88-3)	
Surface tension	27.73 N/m (25 °C)
Partition coefficient n-octanol/water (Log Pow)	2.73 (Experimental value, 20 °C)
Ecology - soil	Low potential for adsorption in soil.
cobalt(II) 2-ethylhexanoate (136-52-7)	
Surface tension	0.064 N/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Partition coefficient n-octanol/water (Log Pow)	2.96 Source: ECHA
Ecology - soil	No (test)data on mobility of the substance available.
cyclohexane (110-82-7)	
Mobility in soil	770 Source: ECHA
Surface tension	0.025 N/m (20 °C)
Partition coefficient n-octanol/water (Log Pow)	3.44 (Experimental value, Other, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.89 (log Koc, QSAR)
Ecology - soil	Low potential for adsorption in soil.

12.5. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

SECTION 13: Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

IMDG	IATA	UNRTDG
14.1. UN number		
1993	1993	1993
14.2. UN Proper Shipping Name		
FLAMMABLE LIQUID, N.O.S. (CONTAINS : acetone)	Flammable liquid, n.o.s. (CONTAINS : acetone)	Flammable Liquid, N.O.S. (CONTAINS: Acetone)
14.3. Transport hazard class(es)		
3	3	Not applicable
		Not applicable
14.4. Packing group		
II	II	II
14.5. Environmental hazards		
Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available		

14.6. Special precautions for user

Transport by road and rail
No data available

Transport by sea
Special provisions (IMDG) : 274
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP1, TP28, TP8
EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage) : S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER
Stowage category (IMDG) : B

Air transport
PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
Special provisions (IATA) : A3
ERG code (IATA) : 3H

14.7. Transport in bulk according to IMO instruments

Not applicable

14.8. Hazchem or Emergency Action Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

acetone (67-64-1)	
Hazardous Substances and New Organisms Act	
HSNO Approval Number	HSR001070

Methyl ethyl ketone (78-93-3)	
Hazardous Substances and New Organisms Act	
HSNO Approval Number	HSR001190

Xylene (1330-20-7)	
Hazardous Substances and New Organisms Act	
HSNO Approval Number	HSR000983

Ethylbenzene (100-41-4)	
Hazardous Substances and New Organisms Act	
HSNO Approval Number	HSR001151

toluene (108-88-3)	
Hazardous Substances and New Organisms Act	
HSNO Approval Number	HSR001227

cyclohexane (110-82-7)	
Hazardous Substances and New Organisms Act	
HSNO Approval Number	HSR001111

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Issue date : 17/03/2022
Revision date : 17/03/2022
Supersedes : 17/03/2022

Full text of H-statements	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Acute 2	Hazardous to the aquatic environment — Acute Hazard, Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2

Full text of H-statements	
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 1	Flammable liquids, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1A	Skin sensitisation, category 1A
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H224	Extremely flammable liquid and vapour
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), New Zealand

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.