SAFETY DATA SHEET

Kilfrost K400

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name:	Kilfrost K400
Unique formula identifier (UFI):	4500-W02Q-U00H-Q7VE

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

Relevant identified uses of the substance or mixture:	Lubricant for pneumatic tools. Restricted to professional users.
Uses advised against :	None known.

1.3. Details of the supplier of the safety data sheet

Company and address:	**Kilfrost Limited** Albion Works Haltwhistle NE49 OHJ Northumberland ENGLAND Tel: +44 (01434) 320332 Fax: +44 (01434) 321463
E-mail:	info@kilfrost.com
Revision:	05/12/2023
SDS Version:	2.0
Date of previous version:	28/11/2023 (2.0)

1.4. Emergency telephone number

In the event of a medical enquiry involving this product, please contact NHS 111 or call a doctor.
See section 4 "First aid measures".

SECTION 2: HAZARDS IDENTIFICATION

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.1. Classification of the substance or mixture

Acute Tox. 4; H302, Harmful if swallowed.
Eye Irrit. 2; H319, Causes serious eye irritation.
STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Hazard pictogram(s):



Signal word:	Warning
Hazard statement(s):	Harmful if swallowed. (H302) Causes serious eye irritation. (H319) May cause damage to organs through prolonged or repeated exposure. (H373)
Precautionary statement(s):	
General:	-
Prevention:	Do not breathe vapour/mist. (P260) Wash hands thoroughly after handling. (P264) Do not eat, drink or smoke when using this product. (P270) Wear face protection/protective gloves/protective clothing. (P280)
Response:	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. (P301+P312) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338) Get medical advice/attention if you feel unwell. (P314) Rinse mouth. (P330) If eye irritation persists: Get medical advice/attention. (P337+P313)
Storage:	Store in a well-ventilated place. Keep container tightly closed. (P403+P233)
Disposal:	Dispose of contents/container in accordance with local regulation (P501)
Hazardous substances:	Ethanediol
Additional labelling:	UFI: 4500-W02Q-U00H-Q7VE

2.3. Other hazards

Additional warnings:	This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Ethanediol	CAS No.: 107-21-1 EC No.: 203-473-3 UK-REACH: 01-1060922537-9-0026 Index No.: 603-027-00-1	30-60%	Acute Tox. 4, H302 STOT RE 2, H373	[1]
Sulfonic acids, petroleum, sodium salts	CAS No.: 68608-26-4 EC No.: 271-781-5 UK-REACH: Index No.:	10-30%	Eye Irrit. 2, H319	[19]
Sodium Benzoate	CAS No.: 532-32-1 EC No.: 208-534-8 UK-REACH: Index No.:	1-5%	Eye Irrit. 2, H319	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit.
[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information:

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.
Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation:

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact:

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical

	advice/attention.
Eye contact:	If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.
Ingestion:	In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.
Burns:	Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.
Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

4.3. Indication of any immediate medical attention and special treatment needed

If eye irritation persists: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:
Sulphur oxides
Carbon oxides (CO / CO2)

Some metal oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.
Ensure adequate ventilation, especially in confined areas.
Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.
Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid direct contact with the product.
Avoid contact during pregnancy and while nursing.
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material:	Always store in containers of the same material as the original container.
Storage temperature:	Keep away from food, drink and animal feeding stuffs. Store in tightly closed, original container in a dry, cool and well ventilated place.
Incompatible materials:	Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Ethanediol
Long term exposure limit (8 hours) (ppm): 20(vapour)
Long term exposure limit (8 hours) (mg/m³): 10(particulate)/52(vapour)
Short term exposure limit (15 minutes) (ppm): 40 (vapour)
Short term exposure limit (15 minutes) (mg/m³): 104 (vapour)
Annotations:
Sk = Can be absorbed through the skin and lead to systemic toxicity.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

Ethanediol

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	106 mg/kg bw/day
Long term – Local effects - Workers	Inhalation	35 mg/m³

Sodium Benzoate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	62.5 mg/kg bw/day
Long term – Local effects - Workers	Inhalation	0.1 mg/m³
Long term – Systemic effects - Workers	Inhalation	3 mg/m³

Sulfonic acids, petroleum, sodium salts

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	3.33 mg/kg bw/day
Long term – Systemic effects - Workers	Inhalation	0.66 mg/m³

PNEC

Ethanediol

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		10 mg/L
Freshwater sediment		37 mg/kg
Intermittent release (freshwater)		10 mg/L
Intermittent release (marine water)		10 mg/L
Marine water		1 mg/L
Marine water sediment		3.7 mg/kg

Sewage treatment plant		199.5 mg/L
Soil		1.53 mg/kg

Sodium Benzoate

Route of exposure:	**Duration of Exposure:**	**PNEC:**
Freshwater		0.13 mg/L
Freshwater sediment		1.76 mg/kg
Intermittent release (freshwater)		305 µg/L
Intermittent release (marine water)		305 µg/L
Marine water		0.013 mg/L
Marine water sediment		0.176 mg/kg
Predators		300 mg/kg
Sewage treatment plant		10 mg/L
Soil		0.276 mg/kg

Sulfonic acids, petroleum, sodium salts

Route of exposure:	**Duration of Exposure:**	**PNEC:**
Freshwater		1 mg/L
Freshwater sediment		723500 g/kg
Intermittent release (freshwater)		10 mg/L
Marine water		1 mg/L
Marine water sediment		723500 g/kg
Predators		16.667 mg/kg
Sewage treatment plant		100 mg/L
Soil		868700 g/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations: Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios: There are no exposure scenarios implemented for this product.

Exposure limits: Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures: The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked. Apply standard precautions during use of the

product. Avoid inhalation of vapours.

Hygiene measures: In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure: Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally: Use only UKCA marked protective equipment.

Respiratory Equipment:

Type	Class	Colour	Standards	
Combination filter A2P3	Class 2/3	Brown/White	EN14387	
Respiratory protection is not needed in the event of adequate ventilation.				

Skin protection:

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.	-	-	

Hand protection:

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0,2	> 240	EN374-2, EN374-3, EN388	

Eye protection:

Type	Standards	
Face shield alternatively safety glasses with side shields.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Red-brown
Odour / Odour threshold:	Mild
pH:	8.5 - 9.5
Density (g/cm³):	-
Relative density:	1.107 (20 °C)
Kinematic viscosity:	20 m²/s (20 °C)
Particle characteristics:	Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C):	-60
Softening point/range (waxes and pastes) (°C):	Does not apply to liquids.
Boiling point (°C):	115 - 125 @ 1013hPa
Vapour pressure:	8.5 mmHg (20 °C)
Relative vapour density:	1.69
Decomposition temperature (°C):	No data available

Data on fire and explosion hazards

Flash point (°C):	>115 Closed cup
Flammability (°C):	No data available
Auto-ignition temperature (°C):	398
Lower and upper explosion limit (% v/v):	3.2 - 15.3

Solubility

Solubility in water:	Miscible with water
n-octanol/water coefficient:	1.36
Solubility in fat (g/L):	Testing not relevant or not possible due to the nature of the product.

9.2. Other information

Evaporation rate (n-butylacetate = 100):	0.01
Oxidizing properties:	No data available
Other physical and chemical parameters:	No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
No data available.

10.2. Chemical stability
The product is stable under the conditions, noted in section 7 “Handling and storage”.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

Acute toxicity

ATE oral (mg/kg) 1,021.0

Product/substance	Ethanediol
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	7712 mg/kg

Product/substance	Ethanediol
Species:	Rat
Route of exposure:	Dermal
Result:	10600 mg/kg

Product/substance	Ethanediol
Species:	Rabbit
Route of exposure:	Dermal
Result:	>3500 mg/kg

Product/substance	Ethanediol
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50 (4 hours)
Result:	>2.5 mg/L

Product/substance	Sulfonic acids, petroleum, sodium salts
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	>1.9 mg/L

Product/substance	Sulfonic acids, petroleum, sodium salts
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	>5000 mg/kg

Harmful if swallowed.

Skin corrosion/irritation

Product/substance	Sulfonic acids, petroleum, sodium salts

Result: No adverse effect observed (Not irritating)

Product/substance Sodium Benzoate
Result: No adverse effect observed (Not irritating)

Serious eye damage/irritation

Product/substance Sulfonic acids, petroleum, sodium salts
Result: Adverse effect observed (Highly irritating)

Product/substance Sodium Benzoate
Result: Adverse effect observed (Causes serious eye damage)

Causes serious eye irritation.

Respiratory sensitisation

Product/substance Sulfonic acids, petroleum, sodium salts
Result: No adverse effect observed (not sensitising)

Product/substance Sodium Benzoate
Result: No adverse effect observed (not sensitising)

Skin sensitisation

Product/substance Sulfonic acids, petroleum, sodium salts
Result: No adverse effect observed (not sensitising)

Product/substance Sodium Benzoate
Result: No adverse effect observed (not sensitising)

Germ cell mutagenicity

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

Carcinogenicity

Product/substance Ethanediol
Test method: OECD 452
Species: male
Route of exposure: Oral
Duration: 24 months
Test: NOAEL
Result: 1000 mg/kgbw

Product/substance Ethanediol
Test method: OECD 452
Species: female
Route of exposure: Oral
Duration: 24 months
Test: NOAEL
Result: 1500 mg/kgbw

Reproductive toxicity

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

STOT-single exposure

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

STOT-repeated exposure

Product/substance Ethanediol

Test method:	OECD 407
Species:	Rat
Route of exposure:	Oral
Duration:	90 days
Test:	NOAEL
Result:	200 mg/kg bw/day
Conclusion:	Adverse effect observed

Product/substance	Ethanediol
Test method:	OECD 410
Species:	Rat
Route of exposure:	Dermal
Duration:	90 days
Test:	NOAEL
Result:	2220 mg/kg bw/day
Conclusion:	Adverse effect observed

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Product/substance	Ethanediol
Kin. viscocity (mm²/s):	24.8
Conclusion:	Aspiration hazard not applicable

11.2. Information on other hazards

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.
Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Acute toxicity - fish

LC50, 96 hours: 18500 mg/l, Oncorhynchus mykiss (Rainbow trout)
Estimated value

Product/substance	Ethanediol
Species:	Fish, Oncorhynchus mykiss

Duration:	96 hours
Test:	LC50
Result:	41000 mg/L

Product/substance	Ethanediol
Species:	Fish, Oncorhynchus mykiss
Duration:	96 hours
Test:	LC50
Result:	14-18 ml/L

Product/substance	Ethanediol
Species:	Crustacean, Daphnia magna
Duration:	48 hours
Test:	EC50
Result:	46300 mg/L

Product/substance	Ethanediol
Species:	Algae, Pseudokirchneriella subcapitata
Duration:	96 hours
Test:	EC50
Result:	6500-13000 mg/L

Product/substance	Ethanediol
Species:	Fish, Pimephales promelas
Duration:	7 days
Test:	NOEC
Result:	15380 mg/L

Product/substance	Ethanediol
Species:	Algae, Selenastrum capricornutum
Duration:	96 hours
Test:	EC50
Result:	6500-13000 mg/L

Product/substance	Ethanediol
Compartment:	Activated Sludge Plant
Duration:	30 minutes
Test:	EC20
Result:	>1995 mg/L

Product/substance	Ethanediol
Species:	Ceriodaphnia dubia
Duration:	7 days
Test:	NOEC
Result:	8590 mg/L

Product/substance	Sulfonic acids, petroleum, sodium salts
Species:	Fish
Duration:	96 hours
Test:	LL50
Result:	>10000 mg/L

Product/substance	Sulfonic acids, petroleum, sodium salts
Species:	Crustacean

Duration:	48 hours
Test:	EC50
Result:	>1000 mg/L

Product/substance	Sulfonic acids, petroleum, sodium salts
Species:	Algae
Duration:	72 hours
Test:	ErC50
Result:	>1000 mg/L

Product/substance	Sulfonic acids, petroleum, sodium salts
Species:	Bacteria
Duration:	8 hours
Test:	EC50
Result:	<5000 mg/L

12.2. Persistence and degradability

Product/substance	Ethanediol
Biodegradable:	Yes
Result:	90% : > 10 days

Product/substance	Sodium Benzoate
Biodegradable:	Yes

12.3. Bioaccumulative potential

Product/substance	Ethanediol
Potential bioaccumulation:	No data available.
LogPow:	-1.36
BCF:	No data available.

Product/substance	Sodium Benzoate
Potential bioaccumulation:	No data available.
LogPow:	1.88
BCF:	No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product is covered by the regulations on hazardous waste.
HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP 6 - Acute toxicity
Dispose of contents/container to an approved waste disposal plant.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

Not applicable.

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: REGULATORY INFORMATION

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

Restrictions for application:	Restricted to professional users. People under the age of 18 shall not be exposed to this product. Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.
Demands for specific education:	No specific requirements.
SEVESO - Categories / dangerous substances:	Not applicable.
Additional information:	Not applicable.

Sources:	The Management of Health and Safety at Work Regulations 1999. The Health and Safety at Work etc. Act 1974 Regulations 2013. Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law. Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

H302, Harmful if swallowed.
H319, Causes serious eye irritation.
H373, May cause damage to organs through prolonged or repeated exposure.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

▼The safety data sheet is validated by

N. McLeod

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product.
Information in this safety data sheet cannot be used as a product specification.
Country-language: GB-en