Safety Data Sheet

according to UK REACH Regulation

ADDINOL Guideway Oil XG 32

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

1.1. Product identifier

ADDINOL Guideway Oil XG 32

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

Use of the substance/mixture

Lubricant and additive.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name:	ADDINOL Lube Oil GmbH 4609	
Street:	Am Haupttor	
Place:	D-06237 Leuna	
Telephone:	+49 (0) 3461 845-0	Telefax: +49 (0) 3461 845-555
E-mail:	info@addinol.de	
Contact person:	Application Technology	
Internet:	www.addinol.de	
Responsible Department:	ADDINOL Application Technology	

Supplier

Company name:	ETL Fluid Experts Ltd.
Street:	Grimbald Crag Road
Place:	GB-HG5 8PY Knaresborough, North Yorkshire
Telephone:	+44 (0)1423 522911
E-mail:	sales(@)etlfe.com
Internet:	https://www.etlfluidexperts.com/

1.4. Emergency telephone number:

+44 (0)1423 522911 - This number is serviced during office hours.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2. Label elements

GB CLP Regulation

Hazard statements

H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P501	Dispose of contents/container to industrial incineration plant.

Additional advice on labelling

Product is classified and labelled in accordance with EC regulations or the corresponding national laws.

2.3. Other hazards

Prolonged/repetitive skin contact may cause skin defattening or dermatitis.
Spilled product must not leak into the ground.
Do not allow uncontrolled leakage of product into the environment.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic			40 - < 60 %
	265-157-1		01-2119484627-25	
	Asp. Tox. 1; H304			
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; base oil - not specified			40 - < 60 %
	265-159-2		01-2119480132-48	
	Asp. Tox. 1; H304			
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines			0.1 - < 0.3 %
	627-034-4		01-2119473797-19	
	Acute Tox. 4, Skin Corr. 1B, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1; H302 H314 H335 H373 H304 H400 H410			
104-76-7	2-Ethylhexan-1-ol			< 0.1 %
	203-234-3			
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H332 H315 H319 H335			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
64742-54-7	265-157-1	Distillates (petroleum), hydrotreated heavy paraffinic	40 - < 60 %
	dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg		
64742-56-9	265-159-2	Distillates (petroleum), solvent-dewaxed light paraffinic; base oil - not specified	40 - < 60 %
	dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg		
1213789-63-9	627-034-4	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	0.1 - < 0.3 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 1689 mg/kg Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=10		
104-76-7	203-234-3	2-Ethylhexan-1-ol	< 0.1 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 = ca. 2047 mg/kg		

Further Information

DMSO-Extract < 3 %; IP 346. Classification system: The classification corresponds to the current EC lists and is completed by information from specialist literature and company information.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Self-protection of the first aider. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

After inhalation

Move victim to fresh air. Put victim at rest and keep warm. Seek medical attention if problems persist.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing. In case of skin irritation, seek medical treatment.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Do NOT induce vomiting.

Rinse mouth thoroughly with water. Call a physician immediately.

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

No information available.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam. Extinguishing powder. Carbon dioxide (CO2). Atomized water. Sand.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2). Nitrogen oxides (NOx). Sulfur oxides. Phosphorus oxides. carbon black.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Co-ordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers. In case of fire and/or explosion do not breathe fumes. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

High slip hazard because of leaking or spilled product. Remove all sources of ignition. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Section 12: Ecological Information (non-mandatory)
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Work in well-ventilated zones or use proper respiratory protection. Avoid oil mist. If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

Advice on general occupational hygiene

Wash hands before breaks and after work. Take off immediately all contaminated clothing. Wash contaminated clothing prior to re-use. Do not eat, drink, smoke or sneeze at the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity. Keep/Store only in original container.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.
Keep away from: Oxidizing agent

Further information on storage conditions

Recommended storage temperature: 5 - 40°C
Protect against: heat. UV-radiation/sunlight. frost.

7.3. Specific end use(s)

Further information: see technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
104-76-7	2-ethylhexan-1-ol	1	5.4		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic			
Worker DNEL, long-term		inhalation	systemic	2,73 mg/m³
Worker DNEL, long-term		inhalation	local	5,58 mg/m³
Worker DNEL, long-term		dermal	systemic	0,97 mg/kg bw/day
Consumer DNEL, long-term		inhalation	local	1,19 mg/m³
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; base oil - not specified			
Worker DNEL, long-term		inhalation	systemic	2,73 mg/m³
Worker DNEL, long-term		inhalation	local	5,58 mg/m³
Worker DNEL, long-term		dermal	systemic	0,97 mg/kg bw/day
Consumer DNEL, long-term		inhalation	local	1,19 mg/m³
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines			
Worker DNEL, long-term		inhalation	systemic	0,38 mg/m³
Worker DNEL, long-term		inhalation	local	1 mg/m³
Worker DNEL, acute		inhalation	local	1 mg/m³
Consumer DNEL, long-term		inhalation	systemic	0,035 mg/m³
Consumer DNEL, long-term		oral	systemic	0,04 mg/kg bw/day
104-76-7	2-Ethylhexan-1-ol			
Worker DNEL, long-term		inhalation	systemic	12,8 mg/m³
Worker DNEL, long-term		inhalation	local	53,2 mg/m³
Worker DNEL, acute		inhalation	local	53,2 mg/m³
Worker DNEL, long-term		dermal	systemic	23 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	2,3 mg/m³
Consumer DNEL, long-term		inhalation	local	26,6 mg/m³
Consumer DNEL, acute		inhalation	local	26,6 mg/m³
Consumer DNEL, long-term		dermal	systemic	11,4 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	1,1 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	Value
64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic
Secondary poisoning	9,33 mg/kg
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; base oil - not specified
Secondary poisoning	9,33 mg/kg
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines
Freshwater	0,00026 mg/l
Freshwater (intermittent releases)	0,0016 mg/l
Marine water	0,000026 mg/l
Freshwater sediment	3,76 mg/kg
Marine sediment	0,376 mg/kg
Micro-organisms in sewage treatment plants (STP)	0,55 mg/l
Soil	10 mg/kg
104-76-7	2-Ethylhexan-1-ol
Freshwater	0,017 mg/l
Freshwater (intermittent releases)	0,17 mg/l
Marine water	0,002 mg/l
Freshwater sediment	0,284 mg/kg
Marine sediment	0,028 mg/kg
Secondary poisoning	55 mg/kg
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	0,047 mg/kg

Additional advice on limit values

Recommended limit value for oil mist
TWA: 5 mg/m³
STEL: 10 mg/m³

The product does not contain any relevant quantities of substances with legally established exposure limitation.

8.2. Exposure controls




Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): EN 166

Hand protection

Tested protective gloves are to be worn: German Industry Norms (DIN) / European Norms (EN): EN ISO 374

Duration of wearing with permanent contact: 480 min
Suitable material: NBR (Nitrile rubber).

Thickness of glove material: 0.7 mm.

Wearing time with occasional contact (splashes): 30 min
Suitable material: NBR (Nitrile rubber).
Thickness of glove material: 0.4 mm

Protect skin by using skin protective cream.

Skin protection

Wear suitable protective clothing. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Breathing protection with filter against organic gases and vapours type A - boiling point > 65°C: A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	brown
Odour:	like: mineral oil.
Odour threshold:	not determined

		Test method
Melting point/freezing point:	No data available	
Boiling point or initial boiling point and boiling range:	not determined	
Flammability:	No data available	
Lower explosion limits:	No data available	
Upper explosion limits:	No data available	
Flash point:	228 °C	DIN EN ISO 2592
Auto-ignition temperature:	not determined	
Decomposition temperature:	No data available	
pH-Value:	No data available	
Viscosity / kinematic: (at 40 °C)	31,8 mm²/s	ASTM D 7042
Water solubility:	virtually insoluble	
Solubility in other solvents		
No data available		
Partition coefficient n-octanol/water:	No data available	
Vapour pressure:	No data available	
Density (at 15 °C):	0,867 g/cm³	DIN 51757
Relative vapour density:	No data available	
Particle characteristics:	No data available	

9.2. Other information

Information with regard to physical hazard classes

Explosive properties
No data available

Self-ignition temperature

Solid:	No data available
Gas:	No data available

Oxidizing properties
No data available

Other safety characteristics

Evaporation rate:	No data available	
Pour point:	-32 °C	ASTM D 7346

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Refer to chapter 7 No further action is necessary.

Do not overheat to avoid decomposition by heat.

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO_2). Nitrogen oxides (NOx). Sulfur oxides. Phosphorus oxides. carbon black.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic					
	oral	LD50 mg/kg	> 5000	Rat	Study report (1982)	OECD Guideline 401
	dermal	LD50 mg/kg	> 5000	Rabbit	Study report (1982)	OECD Guideline 402
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; base oil - not specified					
	oral	LD50 mg/kg	> 5000	Rat	Study report (1982)	OECD Guideline 401
	dermal	LD50 mg/kg	> 5000	Rabbit	Study report (1982)	OECD Guideline 402
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines					
	oral	LD50 mg/kg	1689	Rat	Study report (1993)	OECD Guideline 401
	dermal	LD50 mg/kg	> 2000	Rat	Study report (1985)	OECD Guideline 402
104-76-7	2-Ethylhexan-1-ol					
	oral	LD50 mg/kg	ca. 2047	Rat	Publication (1969)	OECD Guideline 401
	inhalation vapour	ATE	11 mg/l			
	inhalation dust/mist	ATE	1,5 mg/l			

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
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

Based on available data, the classification criteria are not met.
Prolonged/repetitive skin contact may cause skin defattening or dermatitis.

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

not applicable

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.
Mixture not tested.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic						
	Acute fish toxicity	LL50 mg/l	> 100	96 h	Pimephales promelas	Study report (1995)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	>100	72 h			
	Fish toxicity	NOEC mg/l	>= 1000	14 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; base oil - not specified						
	Acute fish toxicity	LL50 mg/l	> 100	96 h	Pimephales promelas	Study report (1995)	OECD Guideline 203
	Fish toxicity	NOEC mg/l	>= 1000	14 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines						
	Acute fish toxicity	LC50 mg/l	0,84	96 h	Danio rerio	Study report (2006)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	0,39	72 h	Desmodesmus subspicatus	Study report (2002)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	0,32	48 h	Daphnia magna	Study report (2006)	OECD Guideline 202
	Crustacea toxicity	NOEC mg/l	0,013	21 d	Daphnia magna	Study report (2002)	OECD Guideline 211
	Acute bacteria toxicity	EC50	32 mg/l ( )	3 h	activated sludge of a predominantly domestic sewag	Study report (1989)	OECD Guideline 209
104-76-7	2-Ethylhexan-1-ol						
	Acute fish toxicity	LC50 mg/l	17,1	96 h	Leuciscus idus melanotus	Study report (1991)	EU Method C.1
	Acute algae toxicity	ErC50	11,5 mg/l	72 h	Desmodesmus subspicatus	Study report (1991)	EU Method C.3
	Acute crustacea toxicity	EC50	39 mg/l	48 h	Daphnia magna	Study report (1991)	EU Method C.2

12.2. Persistence and degradability

Not easily bio-degradable (according to OECD-criteria). Do not allow to enter into surface water or drains.

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	5,16
104-76-7	2-Ethylhexan-1-ol	2,9

BCF

CAS No	Chemical name	BCF	Species	Source
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	173		Environmental Toxico

12.4. Mobility in soil

Due to its low solubility in water the product is almost completely mechanically separated in biological waste water treatment plants.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No data available

Further information

Do not allow uncontrolled leakage of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Must not be disposed of with domestic refuse. Do not allow to enter into surface water or drains.

List of Wastes Code - residues/unused products

130205 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; mineral-based non-chlorinated engine, gear and lubricating oils; hazardous waste

Contaminated packaging

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Dispose of waste according to applicable legislation. Packing which cannot be properly cleaned must be thrown away.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	-
14.2. UN proper shipping name:	-
14.3. Transport hazard class(es):	-
14.4. Packing group:	-

Inland waterways transport (ADN)

14.1. UN number or ID number:	-
14.2. UN proper shipping name:	-
14.3. Transport hazard class(es):	-
14.4. Packing group:	-

Marine transport (IMDG)

14.1. UN number or ID number:	-
14.2. UN proper shipping name:	-
14.3. Transport hazard class(es):	-
14.4. Packing group:	-

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	-
14.2. UN proper shipping name:	-
14.3. Transport hazard class(es):	-
14.4. Packing group:	-

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

Other applicable information

No dangerous good in sense of these transport regulations.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 28, Entry 75

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,3,4,5,6,7,8,9,11,12,16.

Abbreviations and acronyms

Acute Tox: Acute toxicity
Asp. Tox: Aspiration hazard
Skin Corr: Skin corrosion
Skin Irrit: Skin irritation
Eye Irrit: Eye irritation
STOT SE: Specific target organ toxicity - single exposure
STOT RE: Specific target organ toxicity - repeated exposure
Aquatic Acute: Acute aquatic hazard
Aquatic Chronic: Chronic aquatic hazard
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road ; ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways ; ASTM - American Society for the Testing of Materials; ATE - Acute Toxicity Estimates; bw - Body weight; CAO - Cargo Aircraft Only; CAS - Chemical Abstracts Service; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DNEL - Derived No-Effect Level; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); EG - European Union; EN - European standards; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n;o;s; - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; OECD - Organization for Economic Co-operation and Development; PBT - Persistent, Bioaccumulative and Toxic substance; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID -Regulation concerning the International Carriage of Dangerous Goods by Rail; RQ - Reportable Quantity; SADT - Self- Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

The above information describes exclusively the safety requirements of the product and is based on our

present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)