Safety Data Sheet

according to UK REACH Regulation

JMC Synthese Aktivöl

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

1.1. Product identifier

JMC Synthese Aktivöl

UFI: 2S2X-DX62-5G05-QDS3

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

Use of the substance/mixture

Lubricating agent

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name:	Johannes J. Matthies GmbH & Co. KG	
Street:	Hammerbrookstr. 97	
Place:	D-20097 Hamburg	
Telephone:	+ 49 (0) 40 2 37 21-0	Telefax: + 49 (0) 40 2 37 21-363
E-mail:	info@matthies.de	
Internet:	www.matthies.de	
Responsible Department:	Abteilung Produktsicherheit	

Supplier

Company name:	Larsson UK Ltd.
Street:	7 Alpha Court, Phoenix Parkway
Place:	GB-NN17 5DP Corby
Telephone:	+ 44 1536 265633
E-mail:	info@larsson.uk.com
Internet:	www.larsson.uk.com

1.4. Emergency telephone number:

+ 44 1536 265633

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Aerosol 1; H222-H229
Asp. Tox. 1; H304
Skin Irrit. 2; H315
STOT SE 3; H336
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, < 5% hexane
Hydrocabons, C7, n-alkanes, iso-alkanes, cyclics
propan-2-ol; isopropyl alcohol; isopropanol

Signal word: Danger

Pictograms:

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing Aerosol.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P304+P312	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of waste according to applicable legislation.

2.3. Other hazards

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
75-28-5	isobutane			50 - < 100 %
	200-857-2	601-004-00-0	01-2119485395-27	
	Flam. Gas 1, Liquefied gas; H220 H280			
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, < 5% hexane			5 - < 10 %
	921-024-6		01-2119475514-35	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
64742-49-0	Hydrocabons, C7, n-alkanes, iso-alkanes, cyclics			5 - < 10 %
	927-510-4		01-2119475515-33	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
74-98-6	propane			5 - < 10 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1, Liquefied gas; H220 H280			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			3 - < 5 %
	200-661-7	603-117-00-0	01-2119457558-25	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			
106-97-8	butane			1 - < 3 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1, Liquefied gas; H220 H280			
1471316-72-9	Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts			0,1 - < 1 %
	939-603-7		01-2119978241-36	
	Skin Sens. 1B; H317			
68937-41-7	Phenol, isopropylated, phosphate (3:1)			0,1 - < 1 %
	273-066-3		01-2119535109-41	
	Repr. 2, STOT RE 2, Aquatic Chronic 1; H361fd H373 H410			

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		
	921-024-6	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, < 5% hexane	5 - < 10 %
	inhalation: LC50 = > 25,2 mg/l (vapours); dermal: LD50 = > 2800 - 3100 mg/kg; oral: LD50 = > 5000 mg/kg		
64742-49-0	927-510-4	Hydrocabons, C7, n-alkanes, iso-alkanes, cyclics	5 - < 10 %
	inhalation: LC50 = > 23,3 mg/l (vapours); dermal: LD50 = > 2800 - 3100 mg/kg; oral: LD50 = 5500 mg/kg		
67-63-0	200-661-7	propan-2-ol; isopropyl alcohol; isopropanol	3 - < 5 %
	inhalation: LC50 = 47,5 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 5280 mg/kg		
106-97-8	203-448-7	butane	1 - < 3 %
	inhalation: LC50 = 658 ppm (gases)		
1471316-72-9	939-603-7	Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	0,1 - < 1 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 10000 - < 20000 mg/kg Skin Sens. 1B; H317: >= 10 - 100		
68937-41-7	273-066-3	Phenol, isopropylated, phosphate (3:1)	0,1 - < 1 %
	inhalation: LC50 = 200 mg/l (dusts or mists); dermal: LD50 = > 10000 mg/kg; oral: LD50 = > 5000 mg/kg Aquatic Chronic 1; H410: M=10		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

After inhalation

Remove person to fresh air and keep comfortable for breathing. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

Wash with plenty of soap and water. Take off immediately all contaminated clothing and wash it before reuse. When in doubt or if symptoms are observed, get medical advice.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

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

Causes skin irritation. May cause drowsiness or dizziness.
Headache, Nausea, Dizziness.

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

Treat symptomatically. Call a POISON CENTER. Symptoms can occur only after several hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water mist, Carbon dioxide (CO_2), Foam, Extinguishing powder.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon dioxide (CO_2), Carbon monoxide, aldehydes, carbon black, Pyrolysis products, toxic.

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

Additional information

Danger of bursting container.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Use personal protection equipment.

For non-emergency personnel

First aider: Pay attention to self-protection!

For emergency responders

Fight fire with normal precautions from a reasonable distance.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

6.3. Methods and material for containment and cleaning up

For containment

Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Absorb with liquid-binding material (e.g. 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
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Observe instructions for use.
Dust must be exhausted directly at the point of origin. Vapours/aerosols must be exhausted directly at the point of origin. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.
When using do not eat, drink, smoke, sniff.
Personal protection equipment: see section 8

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Heating causes rise in pressure with risk of bursting.

Further information on handling

Avoid contact with skin. Avoid contact with eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Observe in addition any national regulations!

Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.
Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Protect against: Frost. Protect against direct sunlight. Store in a cool dry place. Observe in addition any national regulations!

7.3. Specific end use(s)

Lubricating agent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, < 5% hexane			
Worker DNEL, long-term		inhalation	systemic	2035 mg/m³
Worker DNEL, long-term		dermal	systemic	773 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	608 mg/m³
Consumer DNEL, long-term		dermal	systemic	699 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	699 mg/kg bw/day
64742-49-0	Hydrocabons, C7, n-alkanes, iso-alkanes, cyclics			
Worker DNEL, long-term		inhalation	systemic	2085 mg/m³
Worker DNEL, long-term		dermal	systemic	300 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	447 mg/m³
Consumer DNEL, long-term		dermal	systemic	149 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	149 mg/kg bw/day
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
,				
1471316-72-9	Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts			
Worker DNEL, long-term		inhalation	systemic	35,26 mg/m³
Worker DNEL, long-term		dermal	systemic	25 mg/kg bw/day
Worker DNEL, acute		dermal	local	1,04 mg/cm²
Consumer DNEL, long-term		inhalation	systemic	8,7 mg/m³
Consumer DNEL, acute		dermal	local	0,518 mg/cm²
Consumer DNEL, long-term		oral	systemic	2,5 mg/kg bw/day
68937-41-7	Phenol, isopropylated, phosphate (3:1)			
Worker DNEL, long-term		inhalation	systemic	0,145 mg/m³
Worker DNEL, acute		inhalation	systemic	700 mg/m³
Worker DNEL, long-term		dermal	systemic	0,416 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	2000 mg/kg bw/day
Worker DNEL, acute		dermal	local	16 mg/cm²
Consumer DNEL, acute		inhalation	systemic	350 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,208 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	100 mg/kg bw/day
Consumer DNEL, acute		dermal	local	8 mg/cm²
Consumer DNEL, long-term		oral	systemic	0,04 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	50 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	Value
1471316-72-9	Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts
Freshwater	0,1 mg/l
Freshwater (intermittent releases)	1 mg/l
Marine water	0,1 mg/l
Freshwater sediment	45211 mg/kg
Marine sediment	45211 mg/kg
Micro-organisms in sewage treatment plants (STP)	1000 mg/l
Soil	36739,74 mg/kg
68937-41-7	Phenol, isopropylated, phosphate (3:1)
Freshwater	0 mg/l
Freshwater (intermittent releases)	0,015 mg/l
Marine water	0 mg/l
Freshwater sediment	0,185 mg/kg
Marine sediment	0,018 mg/kg
Secondary poisoning	1,85 mg/kg
Micro-organisms in sewage treatment plants (STP)	100 mg/l
Soil	2,5 mg/kg

Additional advice on limit values

a no restriction
b End of exposure or end of shift
c at long term exposure: after several previous shifts
d before next shift

Y: A risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept
Z: A risk of reproductive effects cannot to be excluded if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept
Whole blood (B)
Urine (U)

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Protective and hygiene measures

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

Eye/face protection

Tightly sealed safety glasses. (DIN EN 166)

Hand protection

Protect skin by using skin protective cream.
When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
Suitable material: NBR (Nitrile rubber)
Permeation time (maximum wear time): 480 min
Thickness of the glove material: 0,45 mm

EN ISO 374

Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols. exceeding exposure limit values: Filtering device with filter or ventilator filtering device of type: AX (DIN EN 141)
Observe the wear time limits as specified by the manufacturer.
Observe in addition any national regulations!

Environmental exposure controls

Avoid release to the environment.
Observe in addition any national regulations!

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	light brown
Odour:	like: Solvent
Odour threshold:	not determined

		Test method
pH-Value (at 20 °C):	not determined	DIN 19268
Changes in the physical state		
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	- 40 °C	
Flash point:	- 80 °C	
Flammability		
Solid/liquid:	Flammable aerosol.	
Lower explosion limits:	1 vol. %	
Upper explosion limits:	11 vol. %	
Auto-ignition temperature:	not determined	
Decomposition temperature:	not determined	
Vapour pressure:	not determined	
Density (at 20 °C):	0,76 g/cm³	DIN 51757
Water solubility:	practically insoluble	
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:	not determined	
Viscosity / kinematic:	not determined	
Relative vapour density:	not determined	

9.2. Other information

Data apply to the technically active substance.: Relative density, Colour, Odour, Viscosity, pH

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable, Ignition hazard

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Do not expose to temperatures above 50 °C. Heating causes rise in pressure with risk of bursting.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air. Take precautionary measures against static discharges.

10.5. Incompatible materials

Oxidizing agent. Pyrophoric or self-heating substances.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon dioxide (CO_2), Carbon monoxide, aldehydes, carbon black, Pyrolysis products, toxic.

Further information

Do not mix with other chemicals.

SECTION 11: Toxicological information

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

Toxicocinetics, metabolism and distribution

No information available.

Acute toxicity

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

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
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, < 5% hexane				
	oral	LD50 > 5000 mg/kg	Rat	Manufacturer	
	dermal	LD50 > 2800 - 3100 mg/kg	Rat	Manufacturer	
	inhalation (4 h) vapour	LC50 > 25,2 mg/l	Rat	Manufacturer	
64742-49-0	Hydrocabons, C7, n-alkanes, iso-alkanes, cyclics				
	oral	LD50 5500 mg/kg	Rat	Manufacturer	
	dermal	LD50 > 2800 - 3100 mg/kg	Rat	Manufacturer	
	inhalation (4 h) vapour	LC50 > 23,3 mg/l	Rat	Manufacturer	OECD 403
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	oral	LD50 5280 mg/kg	Rat	Manufacturer	
	dermal	LD50 > 2000 mg/kg	Rabbit	Manufacturer	
	inhalation (4 h) vapour	LC50 47,5 mg/l	Rat	Manufacturer	
106-97-8	butane				
	inhalation (4 h) gas	LC50 658 ppm	Rat	GESTIS	
1471316-72-9	Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts				
	oral	LD50 > 10000 - < 20000 mg/kg	Rat	Manufacturer	
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	OECD 402
68937-41-7	Phenol, isopropylated, phosphate (3:1)				
	oral	LD50 > 5000 mg/kg	Rat	Manufacturer	
	dermal	LD50 > 10000 mg/kg	Rabbit	Manufacturer	
	inhalation (1 h) dust/mist	LC50 200 mg/l	Rat	Manufacturer	

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.

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.

No indication of human carcinogenicity.

No indications of human germ cell mutagenicity exist.

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

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

Aspiration hazard

May be fatal if swallowed and enters airways.

Specific effects in experiment on an animal

No information available.

11.2. Information on other hazards

Endocrine disrupting properties

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

Other information

No information available.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
75-28-5	isobutane						
	Acute fish toxicity	LC50	91,42 mg/l	96 h	Piscis	United States Environmental Protection A	The Ecosar class program has been develo
	Acute algae toxicity	ErC50	19,37 mg/l	96 h	Algae	US EPA OPPT Risk Assessment Division200	Calculation using ECOSAR Program v1.00.
	Acute crustacea toxicity	EC50	69,43 mg/l	48 h	Daphnia sp.	US EPA OPPT Risk Assessment Division200	Calculation using ECOSAR Program v1.00.
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, < 5% hexane						
	Acute fish toxicity	LC50	> 1 - 10 mg/l	96 h	Pimephales promelas (fathead minnow)	Manufacturer	
	Acute algae toxicity	ErC50	10 - 30 mg/l	72 h	Pseudokirchneriella subcapitata	Manufacturer	OECD 201
	Acute crustacea toxicity	EC50	> 1 - 10 mg/l	48 h	Daphnia magna	Manufacturer	
64742-49-0	Hydrocabons, C7, n-alkanes, iso-alkanes, cyclics						
	Acute fish toxicity	LL50	> 13,4 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	Manufacturer (Study report(1995))	OECD 201
	Acute algae toxicity	ErC50	12 mg/l	72 h	Pseudokirchneriella subcapitata	Manufacturer	SIDS IARF SIAM
	Acute crustacea toxicity	EC50	> 1 - 10 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer	
	Crustacea toxicity	NOEC	1 mg/l	21 d	Daphnia magna (Big water flea)	Manufacturer	SIDS IARF SIAM
74-98-6	propane						
	Acute fish toxicity	LC50	49,9 mg/l	96 h	piscis	Manufacturer	
	Acute algae toxicity	ErC50	19,37 mg/l	96 h	algae	Manufacturer	
	Acute crustacea toxicity	EC50	69,43 mg/l	48 h	Daphnia sp.	Manufacturer	
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol						
	Acute fish toxicity	LC50	9640 mg/l	96 h	Pimephales promelas (fathead minnow) Daphnia magna (Big water flea)	Manufacturer	
	Acute algae toxicity	ErC50	> 100 mg/l	72 h	Desmodesmus subspicatus	Manufacturer	
	Acute crustacea toxicity	EC50	> 100 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer	
106-97-8	butane						
	Acute fish toxicity	LC50	49,9 mg/l	96 h	Piscis	United States Environmental Protection A	The Ecosar class program has been develo
	Acute algae toxicity	ErC50	19,37 mg/l	96 h	Algae	US EPA OPPT Risk Assessment Division200	Calculation using ECOSAR Program v1.00.
	Acute crustacea toxicity	EC50	69,43 mg/l	48 h	Daphnia sp.	US EPA OPPT Risk Assessment Division200	Calculation using ECOSAR Program v1.00.

1471316-72-9	Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts						
	Acute fish toxicity	LC50	> 100 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	Manufacturer	
	Acute algae toxicity	ErC50	> 1000 mg/l	72 h	Pseudokirchneriella subcapitata	Manufacturer	
	Acute crustacea toxicity	EC50	> 1000 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer	
	Acute bacteria toxicity	EC50	> 10000 mg/l ( )	3 h	Activated sludge	Manufacturer	OECD 209
68937-41-7	Phenol, isopropylated, phosphate (3:1)						
	Acute fish toxicity	LC50	1,6 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	Manufacturer	
	Acute crustacea toxicity	EC50	2,44 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer	
	Fish toxicity	NOEC	0,0031 mg/l	33 d	Pimephales promelas (fathead minnow)	Manufacturer	
	Crustacea toxicity	NOEC	0,0415 mg/l	21 d	Daphnia magna (Big water flea)	Manufacturer	
	Acute bacteria toxicity	EC50	>1000 mg/l ( )	3 h	Activated sludge	Manufacturer	

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, < 5% hexane			
	OECD 301F	98 %	28	Manufacturer
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
75-28-5	isobutane	1,09
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, < 5% hexane	3,4 - 5,2
74-98-6	propane	1,09
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	0,05
106-97-8	butane	1,09
1471316-72-9	Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	> 6,91
68937-41-7	Phenol, isopropylated, phosphate (3:1)	85000-150000

BCF

CAS No	Chemical name	BCF	Species	Source
1471316-72-9	Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	70,8	piscis	Manufacturer
68937-41-7	Phenol, isopropylated, phosphate (3:1)	225	Lepomis macrochirus (Bluegill)	Manufacturer

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

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

The product has not been tested.

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 information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

List of Wastes Code - used product

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

Contaminated packaging

Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1

Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0
Transport category:	2
Tunnel restriction code:	D

Inland waterways transport (ADN)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1

Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0

Marine transport (IMDG)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1

Marine pollutant:	P
Special Provisions:	63, 190, 277, 327, 344, 381, 959
Limited quantity:	1000 mL
Excepted quantity:	E0
EmS:	F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS, FLAMMABLE
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1

Special Provisions:	A145 A167 A802
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

Danger releasing substance: Hydrocabons, C7, n-alkanes, iso-alkanes, cyclics
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, < 5% hexane

14.6. Special precautions for user

Warning: Flammable gases.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

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 40, Entry 75

Directive 2010/75/EU on industrial emissions:	No information available.
Directive 2004/42/EC on VOC in paints and varnishes:	No information available.
Information according to Directive 2012/18/EU (SEVESO III):	P3a FLAMMABLE AEROSOLS
Additional information:	E2

Additional information

Aerosol directive (75/324/EEC).

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	3 - highly hazardous to water

Additional information

Observe in addition any national regulations!

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

CAS: Chemical Abstracts Service
CLP: Classification, Labelling and Packaging
EU: European Union
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
REACh: Registration, Evaluation and Authorization of Chemicals
UN: United Nations
PBT: Persistent, Bioaccumulative, Toxic
SVHC: Substance of Very High Concern
vPvB: very Persistent, very Bioaccumulative
ATE: Acute Toxicity Estimates
BCF: Bio-Concentration Factor
DMEL: Derived Minimal Effect Level
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration
VOC: Volatile Organic Compounds
DIN: Deutsches Institut für Normung e.V. (German Institute for Standardization)
EN: European Standard
ISO: International Organization for Standardization
IUCLID: International Uniform ChemicaL Information Database
LC50: Lethal Concentration, 50 %
LD50: Lethal Dose, 50 %
LL50: Lethal Loading, 50 %
OECD: Organisation for Economic Co-operation and Development
EC50: Effective Concentration 50 %
M-Faktor: Multiplication Factor
EL50: Effect Loading, 50 %
ErC50: Effective Concentration 50 %, growth rate
M-Faktor: Multiplication Factor
NOEC: No Observed Effect Concentration
ADN: Accord européen relatif au transport international des marchandises Dangereuses par voies de

Navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
DGR: Dangerous Goods Regulations
EmS: Emergency Schedules
IATA: International Air Transport Association
IBC: Intermediate Bulk Container
ICAO: International Civil Aviation Organization
IE: Industrial Emissions
IMDG: International Maritime Code for Dangerous Goods
LQ: Limited Quantity
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
MFAG: Medical First Aid Guide
RID: Regulations concerning the International carriage of Dangerous goods by rail
TI: Technical Instructions

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

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Asp. Tox. 1; H304	Calculation method
Skin Irrit. 2; H315	Bridging principle "Aerosols"
STOT SE 3; H336	Bridging principle "Aerosols"
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. 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.)