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

1.1. Product identifier

937 Injector Intensive Cleaner MF93700500AB

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

Use of the substance/mixture

Cleaner

1.3. Details of the supplier of the safety data sheet

Company name:	TUNAP GmbH & Co. KG	
Street:	Buergermeister-Seidl-Strasse 2	
Place:	D-82515 Wolfratshausen	
Telephone:	+49 (0) 8171/1600-0	Telefax: +49 (0) 8171/1600-40
e-mail:	sdb@tunap.com	
Internet:	www.tunap.com	

1.4. Emergency telephone number:

111 NHS (National Health Service)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Aerosol 1; H222-H229
Acute Tox. 4; H312
Acute Tox. 4; H332
Asp. Tox. 1; H304
Skin Irrit. 2; H315
Eye Dam. 1; H318
STOT SE 3; H335
STOT SE 3; H336
STOT RE 2; H373
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

xylene
n-propanol
morpholine

Signal word: Danger

Pictograms:

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H312+H332	Harmful in contact with skin or if inhaled.
H315	Causes skin irritation.

H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

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.
P260	Do not breathe spray.
P280	Wear eye protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P312	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

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	
	Classification (GB CLP Regulation)			
1330-20-7	xylene			25 - < 50 %
	215-535-7	601-022-00-9	01-2119488216-32	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 3; H226 H332 H312 H315 H319 H335 H373 H304 H412			
71-23-8	n-propanol			10 - < 20 %
	200-746-9	603-003-00-0	01-2119486761-29	
	Flam. Liq. 2, Eye Dam. 1, STOT SE 3; H225 H318 H336			
64742-95-6	Hydrocarbons, C9, aromatics			10 - < 20 %
	918-668-5		01-2119455851-35	
	Flam. Liq. 3, STOT SE 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H335 H336 H304 H411 EUH066			
100-41-4	ethylbenzene			10 - < 20 %
	202-849-4	601-023-00-4		
	Flam. Liq. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H225 H332 H315 H319 H335 H373 H304			
110-91-8	morpholine			3 - < 5 %
	203-815-1		01-2119496057-30	
	Flam. Liq. 3, Repr. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1; H226 H361fd H331 H311 H302 H314 H318			
1398506-12-1	Oxirane, 2-ethyl-, homopolymer, 3-aminopropyl C11-14-isoalkyl ethers, C13-rich			1 - < 3 %
	805-631-2			
	Acute Tox. 4, Eye Dam. 1, Aquatic Chronic 2; H302 H318 H411			
108-88-3	toluene			0.1 - < 1 %
	203-625-9	601-021-00-3	01-2119471310-51	
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H225 H361d H315 H336 H373 H304			

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		
1330-20-7	215-535-7	xylene	25 - < 50 %
	inhalation: LC50 = 6700 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 12126 mg/kg; oral: LD50 = 3523 mg/kg		
71-23-8	200-746-9	n-propanol	10 - < 20 %
	inhalation: LC50 = > 33,8 mg/l (vapours); dermal: LD50 = 4032 mg/kg; oral: LD50 = 8000 mg/kg		
64742-95-6	918-668-5	Hydrocarbons, C9, aromatics	10 - < 20 %
	dermal: LD50 = > 3160 mg/kg; oral: LD50 = 3592 mg/kg		
100-41-4	202-849-4	ethylbenzene	10 - < 20 %
	inhalation: LC50 = 17,2 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 15400 mg/kg; oral: LD50 = 3500 mg/kg		
110-91-8	203-815-1	morpholine	3 - < 5 %
	inhalation: LC50 = 8 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: LD50 = ca. 500 mg/kg; oral: LD50 = ca. 1900 mg/kg		
1398506-12-1	805-631-2	Oxirane, 2-ethyl-, homopolymer, 3-aminopropyl C11-14-isoalkyl ethers, C13-rich	1 - < 3 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg		
108-88-3	203-625-9	toluene	0.1 - < 1 %
	inhalation: LC50 = 49 mg/l (vapours); dermal: LD50 = 12200 mg/kg; oral: LD50 = 5580 mg/kg		

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. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

Wash with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In all cases of doubt, or when symptoms persist, seek 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 troubles or persistent symptoms, 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

Headache, nausea, dizziness, fatigue, skin irritation

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 fog. Foam. Carbon dioxide (CO2). Extinguishing powder.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

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.
Wear personal protection equipment.

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

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). 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.
Wear personal protection equipment (refer to section 8).
In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Advice on protection against fire and explosion

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

Advice on general occupational hygiene

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

Further information on handling

Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Observe legal regulations and provisions.

Hints on joint storage

Do not store together with: Oxidizing agents. Pyrophoric or self-heating substances. Food and feedingstuffs.

Further information on storage conditions

Protect from frost. Protect from direct sunlight. Store in a cool dry place. Observe legal regulations and provisions.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
100-41-4	Ethylbenzene	100	441		TWA (8 h)	WEL
		125	552		STEL (15 min)	WEL
110-91-8	Morpholine	10	36		TWA (8 h)	WEL
		20	72		STEL (15 min)	WEL
71-23-8	Propan-1-ol	200	500		TWA (8 h)	WEL
		250	625		STEL (15 min)	WEL
108-88-3	Toluene	50	191		TWA (8 h)	WEL
		100	384		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid (creatinine)	650 mmol/mol	urine	Post shift

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
1330-20-7	xylene			
Worker DNEL, long-term		inhalation	systemic	221 mg/m³
Worker DNEL, acute		inhalation	systemic	442 mg/m³
Worker DNEL, long-term		inhalation	local	221 mg/m³
Worker DNEL, acute		inhalation	local	442 mg/m³
Worker DNEL, long-term		dermal	systemic	212 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	65,3 mg/m³
Consumer DNEL, acute		inhalation	systemic	260 mg/m³
Consumer DNEL, long-term		inhalation	local	65,3 mg/m³
Consumer DNEL, acute		inhalation	local	260 mg/m³
Consumer DNEL, long-term		dermal	systemic	125 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	12,5 mg/kg bw/day
110-91-8	morpholine			
Worker DNEL, long-term		inhalation	systemic	91 mg/m³
Worker DNEL, long-term		inhalation	local	36 mg/m³
Worker DNEL, acute		inhalation	local	72 mg/m³
Worker DNEL, long-term		dermal	systemic	1,04 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	6,3 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
1330-20-7	xylene	
Freshwater		0,327 mg/l
Freshwater (intermittent releases)		0,327 mg/l
Marine water		0,327 mg/l
Freshwater sediment		12,46 mg/kg
Marine sediment		12,46 mg/kg
Micro-organisms in sewage treatment plants (STP)		6,58 mg/l
Soil		2,31 mg/kg
110-91-8	morpholine	
Freshwater		0,163 mg/l
Freshwater (intermittent releases)		0,09 mg/l
Marine water		0,016 mg/l
Freshwater sediment		1,83 mg/kg
Marine sediment		0,183 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		0,269 mg/kg

Additional advice on limit values

a no restriction
b End of exposure or end of shift
c at long-term exposure:
d before next shift

blood (B)
Urine (U)

8.2. Exposure controls

Appropriate engineering controls

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

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: Tightly sealed safety glasses.
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.
Suitable material: NBR (Nitrile rubber) Breakthrough time: 480min
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.
When exceeding the relevant workplace exposure limits, note the following:
Suitable respiratory protective equipment: Combination filter device (DIN EN 141)..
Filtering device with filter or ventilator filtering device of type: A
Observe the wear time limits as specified by the manufacturer.
Observe legal regulations and provisions.

Environmental exposure controls

Observe legal regulations and provisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	light yellow
Odour:	solvent like

		Test method
Changes in the physical state		
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	120 °C	
Sublimation point:	No information available.	
Softening point:	No information available.	
Flash point:	15 °C	

Flammability

Solid/liquid:	not applicable	
Gas:	not applicable	
Lower explosion limits:	0,7 vol. %	
Upper explosion limits:	13,5 vol. %	
Auto-ignition temperature:	<200 °C	
Self-ignition temperature		
Solid:	not applicable	
Gas:	not applicable	
Decomposition temperature:	not determined	
pH-Value (at 20 °C):		DIN 19268
Viscosity / dynamic:	No information available.	
Viscosity / kinematic:	< 7 mm²/s	
Flow time:	No information available.	
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.	

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	not determined	
Vapour pressure:	No information available.	
Density (at 20 °C):	0,87 g/cm³	DIN 51757
Relative vapour density:	not determined	

9.2. Other information

Information with regard to physical hazard classes

Sustaining combustion: No data available

Oxidizing properties

Not oxidising.

Other safety characteristics

Solvent separation test:	No information available.
Solvent content:	No information available.
Solid content:	not determined
Evaporation rate:	not determined

Further Information

Relative density Data apply to the technically active substance.
pressure - bar (20°C)

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable aerosol.

10.2. Chemical stability

The product is stable under normal conditions.

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 agents. Pyrophoric or self-heating substances.

10.6. Hazardous decomposition products

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

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

Harmful in contact with skin.
Harmful if inhaled.

ATEmix calculated

ATE (dermal) 1946,3 mg/kg; ATE (inhalation vapour) 18,47 mg/l; ATE (inhalation dust/mist) 2,097 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1330-20-7	xylene				
	oral	LD50 3523 mg/kg	Rat	Study report (1986)	EU Method B.1
	dermal	LD50 12126 mg/kg	Rabbit	Publication (1962)	Single dermal dose under occlusion follo
	inhalation (4 h) vapour	LC50 6700 mg/l	Rat	Toxicol Appl Pharmacol 33:543-558. (1975	EU Method B.2
	inhalation dust/mist	ATE 1,5 mg/l			
71-23-8	n-propanol				
	oral	LD50 8000 mg/kg	Rat		
	dermal	LD50 4032 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 > 33,8 mg/l	Rat		
64742-95-6	Hydrocarbons, C9, aromatics				
	oral	LD50 3592 mg/kg	Rat		
	dermal	LD50 > 3160 mg/kg	Rabbit		
100-41-4	ethylbenzene				
	oral	LD50 3500 mg/kg	Rat	GESTIS	
	dermal	LD50 15400 mg/kg	Rabbit	GESTIS	
	inhalation (4 h) vapour	LC50 17,2 mg/l	Rat		
	inhalation dust/mist	ATE 1,5 mg/l			
110-91-8	morpholine				
	oral	LD50 ca. 1900 mg/kg	Rat	Study report (1967)	OECD Guideline 401
	dermal	LD50 ca. 500 mg/kg	Rabbit	Arch. Ind. Hyg Occup. Med. 10 61–68 (195	OECD Guideline 402
	inhalation (4 h) vapour	LC50 8 mg/l	Rat		
	inhalation dust/mist	ATE 0,5 mg/l			
1398506-12-1	Oxirane, 2-ethyl-, homopolymer, 3-aminopropyl C11-14-isoalkyl ethers, C13-rich				
	oral	LD50 > 5000 mg/kg	Rat		
	dermal	LD50 > 2000 mg/kg	Rabbit		
108-88-3	toluene				
	oral	LD50 5580 mg/kg	Rat		

	dermal	LD50 mg/kg	12200	Rabbit	GESTIS	
	inhalation (4 h) vapour	LC50	49 mg/l	Rat	GESTIS	

Irritation and corrosivity

Causes skin irritation.

Causes serious eye damage.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

No indication of human carcinogenicity.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

STOT-single exposure

May cause respiratory irritation. (xylene)

May cause drowsiness or dizziness.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (xylene; ethylbenzene)

Aspiration hazard

May be fatal if swallowed and enters airways.

Specific effects in experiment on an animal

No information available.

Additional information on tests

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
1330-20-7	xylene						
	Acute fish toxicity	LC50	8,4 mg/l	96 h	Oncorhynchus mykiss	Ecotoxicology and Environmental Safety.	OECD Guideline 203
	Acute algae toxicity	ErC50	4,9 mg/l	72 h	Pseudokirchneriella subcapitata	Ecotoxicology and Environmental Safety.	OECD Guideline 201
	Acute crustacea toxicity	EC50	> 3,4 mg/l	48 h	Ceriodaphnia dubia	Ecotoxicology and Environmental Safety 3	other: US EPA 600/4-91-003
	Fish toxicity	NOEC	> 1,3 mg/l	56 d	Oncorhynchus mykiss	Appl. Sci. Branch, Eng. Res. Cent. Denve	Fish were exposed in artificial streams
	Crustacea toxicity	NOEC	1,17 mg/l	7 d	Ceriodaphnia dubia	Ecotoxicology and Environmental Safety 3	other: US EPA 600/4-91-003
	Acute bacteria toxicity	(EC50	> 175 mg/l)	0,5 h	Activated sludge	Research Journal WPCF 60(10) 1850-1856 (	OECD Guideline 209
71-23-8	n-propanol						
	Acute fish toxicity	LC50	4480 mg/l	96 h	Pimephales promelas		
64742-95-6	Hydrocarbons, C9, aromatics						
	Acute fish toxicity	LC50	9,2 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50	2,6-2,9 mg/l	96 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50	3,2 mg/l	48 h	Daphnia magna		
100-41-4	ethylbenzene						
	Acute algae toxicity	ErC50	3,6 mg/l	96 h	Pseudokirchneriella subcapitata	GESTIS	
110-91-8	morpholine						
	Acute fish toxicity	LC50	380 mg/l	96 h	Oncorhynchus mykiss	Chemosphere 9: 753-762 (1980)	other: IRSA
	Acute algae toxicity	ErC50	28 mg/l	96 h	Pseudokirchneriella subcapitata	Chemosphere 9: 753-762 (1980)	other: EPA, National Eutrophication Rese
	Acute crustacea toxicity	EC50	44,5 mg/l	48 h	Daphnia magna	Study report (1997)	OECD Guideline 202
	Algae toxicity	NOEC	10 mg/l	4 d	Desmodesmus subspicatus		
	Crustacea toxicity	NOEC	5 mg/l	21 d	Daphnia magna	Study report (1997)	OECD Guideline 211
1398506-12-1	Oxirane, 2-ethyl-, homopolymer, 3-aminopropyl C11-14-isoalkyl ethers, C13-rich						
	Acute fish toxicity	LC50	>1 - 10 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		

	Acute crustacea toxicity	EC50	>1 mg/l	48 h	Daphnia magna		
108-88-3	toluene						
	Acute fish toxicity	LC50	13 mg/l	96 h	Carassius auratus	IUCLID	
	Acute algae toxicity	ErC50 mg/l	> 433	96 h	Pseudokirchneriella subcapitata	GESTIS	
	Acute crustacea toxicity	EC50 mg/l	11,5	48 h	Daphnia magna		

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
110-91-8	morpholine			
	OECD 301E	93%	25	
	Easily biodegradable (concerning to the criteria of the OECD)			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
1330-20-7	xylene	3,2
71-23-8	n-propanol	0,29
100-41-4	ethylbenzene	3,15
110-91-8	morpholine	-2,55
108-88-3	toluene	2,73

BCF

CAS No	Chemical name	BCF	Species	Source
1330-20-7	xylene	> 5,5 - < 12,2	Oncorhynchus mykiss	Appl. Sci. Branch, E
110-91-8	morpholine	0	Cyprinus carpio	Review article or ha

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

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID 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+8
Classification code:	5FC
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0
Transport category:	1
Tunnel restriction code:	D

Inland waterways transport (ADN)

14.1. UN number or ID 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+8
Classification code:	5FC
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0

Marine transport (IMDG)

14.1. UN number or ID 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+8
Marine pollutant:	no
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 or ID number:	UN 1950

14.2. UN proper shipping name:	AEROSOLS, flammable, containing substances in Class 8, Packing Group II
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1+8
Special Provisions:	A145 A167 A802
Limited quantity Passenger:	Forbidden
Passenger LQ:	Forbidden
Excepted quantity:	E0
IATA-packing instructions - Passenger:	Forbidden
IATA-max. quantity - Passenger:	Forbidden
IATA-packing instructions - Cargo:	Forbidden
IATA-max. quantity - Cargo:	Forbidden

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

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 48, Entry 75

2010/75/EU (VOC):	No information available.
2004/42/EC (VOC):	No information available.

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
Aerosol Directive (75/324/)

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Water hazard class (D):	2 - obviously hazardous to water
Skin resorption/Sensitization:	Permeates easily through outer skin and causes poisoning.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,3.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA: International Air Transport Association
IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL/DMEL: Derived No Effect Level / Derived Minimal Effect Level
WEL (UK): Workplace Exposure Limits
TWA (EC): Time-Weighted Average
ATE: Acute Toxicity Estimate
STEL (EC) Short Term Exposure Limit
LC50: Lethal Concentration
EC50: half maximal Effective Concentration
ErC50: means EC50 in terms of reduction of growth rate

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

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Acute Tox. 4; H312	Bridging principle "Aerosols"
Acute Tox. 4; H332	Bridging principle "Aerosols"
Asp. Tox. 1; H304	Calculation method
Skin Irrit. 2; H315	Bridging principle "Aerosols"
Eye Dam. 1; H318	Bridging principle "Aerosols"
STOT SE 3; H335	Bridging principle "Aerosols"
STOT SE 3; H336	Bridging principle "Aerosols"
STOT RE 2; H373	Bridging principle "Aerosols"
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H312+H332	Harmful in contact with skin or if inhaled.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

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