Safety Data Sheet

according to Regulation (EC) No 1907/2006

Klingerflon (Spray)

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

1.1. Product identifier

Klingerflon (Spray)

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

Use of the substance/mixture

Special finishes

1.3. Details of the supplier of the safety data sheet

Company name:	KLINGER GmbH	
Street:	Richard-Klinger-Straße 37	
Place:	D-65510 Idstein	
Telephone:	0049-(0)6126-4016-0	Telefax: 0049-(0)6126-4016-11
e-mail:	info@klinger.de	
Internet:	www.klinger.de	
Responsible Department:	laboratory	

1.4. Emergency telephone number: 0049-(0)6126-4016-0

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Hazard categories:
Aerosol: Aerosol 1
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Dam. 1
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 3
Hazard Statements:
Extremely flammable aerosol.
Pressurised container: May burst if heated.
Causes skin irritation.
Causes serious eye damage.
May cause drowsiness or dizziness.
Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazardous components which must be listed on the label

propan-2-ol; isopropyl alcohol; isopropanol
Hydrocarbons, C6-C7, isoalkanes, cyclics, < 5% n-hexane
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
Tetra-n-butyl titanate, polymer with water

Signal word: Danger

Pictograms:

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.
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.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
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.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
106-97-8	butane			45 - < 50 %
	203-448-7			
	Flam. Gas 1, Liquefied gas; H220 H280			
74-98-6	propane			20 - < 25 %
	200-827-9			
	Flam. Gas 1, Liquefied gas; H220 H280			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			10 - < 12.5 %
	200-661-7		01-2119457558-25	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			
	Hydrocarbons, C6-C7, isoalkanes, cyclics, < 5% n-hexane			2.5 - < 5 %
	926-605-8		01-2119486291-36	
	Flam. Liq. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H336 H304 H411			
	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics			2.5 - < 5 %
	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			
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane			2.5 - < 5 %
	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			
	Hydrocarbons, C6, isoalkanes, <5% n-hexane			2.5 - < 5 %
	931-254-9		01-2119484651-34	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
162303-51-7	Tetra-n-butyl titanate, polymer with water			2.5 - < 5 %
	Flam. Liq. 3, Skin Irrit. 2, Eye Dam. 1, STOT SE 3, STOT SE 3; H226 H315 H318 H335 H336			
110-54-3	n-hexane			0.1 - < 0.5 %
	203-777-6	601-037-00-0	01-2119480412-44	
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 2; H225 H361f H315 H336 H373 H304 H411			
110-82-7	cyclohexane			< 0.1 %
	203-806-2		01-2119463273-41	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1; H225 H315 H336 H304 H400 H410			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician in any case!

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

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

After ingestion

Observe risk of aspiration if vomiting occurs. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2), Foam, Extinguishing powder.

Unsuitable extinguishing media

Water.

5.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

6.3. Methods and material for containment and cleaning up

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.

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

Do not pierce or burn, even after use. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Do not spray on naked flames or any incandescent material. Protect from sunlight. Do no expose to temperatures exceeding 50°C/122°F. Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

Further information on handling

Heating causes rise in pressure with risk of bursting.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on storage compatibility

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

7.3. Specific end use(s)

Special finishes

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
110-82-7	Cyclohexane	100	350		TWA (8 h)	WEL
		300	1050		STEL (15 min)	WEL
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL
110-54-3	n-Hexane	20	72		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane		
Worker DNEL, long-term	dermal	systemic	773 mg/kg bw/day
Worker DNEL, long-term	inhalation	systemic	2035 mg/m³
Consumer DNEL, long-term	dermal	systemic	699 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	608 mg/m³
Consumer DNEL, long-term	oral	systemic	699 mg/kg bw/day

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Wear eye/face protection. Suitable eye protection: goggles. DIN EN 166

Hand protection

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. DIN EN 374 Suitable material: Butyl caoutchouc (butyl rubber)
Thickness of the glove material:0,5 mm
Breakthrough time (maximum wearing time): 240 min
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.

Skin protection

Wear anti-static footwear and clothing

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Combination filtering device (EN 14387) A-P2

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	whitish
Odour:	characteristic

	Test method
pH-Value:	not applicable

Changes in the physical state

Melting point:	not applicable	
Initial boiling point and boiling range:	< -20 °C	
Flash point:	< -20 °C	
Sustaining combustion:	No data available	

Flammability

Solid:	not applicable	
Gas:	not applicable	

Explosive properties

In use, may form flammable/explosive vapour-air mixture.

Lower explosion limits:	1,2 vol. %	
Upper explosion limits:	12 vol. %	
Ignition temperature:	> 200 °C	

Auto-ignition temperature

Solid:	not applicable	
Gas:	not applicable	
Decomposition temperature:	not determined	

Oxidizing properties

Not oxidizing.

Vapour pressure:	not determined	
Density (at 20 °C):	0,61 g/cm³	calculated.
Water solubility:	insoluble	

Solubility in other solvents

not determined

Partition coefficient:	not determined	
Viscosity / kinematic:	not applicable	
Vapour density:	not determined	
Evaporation rate:	not determined	

9.2. Other information

Solid content: not determined

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

No known hazardous reactions.

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.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Gases/vapours, toxic.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
106-97-8	butane				
	inhalative (4 h) vapour	LC50	658 mg/l	Rat	
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	oral	LD50	5840 mg/kg	Rat	
	dermal	LD50	13900 mg/kg	Rabbit	
	inhalative (4 h) vapour	LC50	47,5 mg/l	Rat	
	Hydrocarbons, C6-C7, isoalkanes, cyclics, < 5% n-hexane				
	oral	LD50	>5000 mg/kg	Rat	OECD 401
	dermal	LD50	>2000 mg/kg	Rabbit	OECD 402
	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics				
	oral	LD50	>5840 mg/kg	Rat	
	dermal	LD50	>2920 mg/kg	Rat	
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane				
	oral	LD50	> 5000 mg/kg	Rat	
	dermal	LD50	> 2000 mg/kg	Rat	
	inhalative (4 h) vapour	LC50	(> 20) mg/l	Rat	
	Hydrocarbons, C6, isoalkanes, <5% n-hexane				
	oral	LD50	> 5000 mg/kg	Rat	OECD 401
	dermal	LD50	> 3000 mg/kg	Rat	OECD 402
	inhalative (4 h) vapour	LC50	> 20 mg/l	Rat	OECD 403
162303-51-7	Tetra-n-butyl titanate, polymer with water				
	oral	LD50	>2000 mg/kg	Rat	

Irritation and corrosivity

Causes skin irritation.
Causes serious eye damage.

Sensitising effects

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

STOT-single exposure

May cause drowsiness or dizziness. (propan-2-ol; isopropyl alcohol; isopropanol), (Hydrocarbons, C6-C7, isoalkanes, cyclics, < 5% n-hexane), (Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics), (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane), (Hydrocarbons, C6, isoalkanes, <5% n-hexane), (Tetra-n-butyl titanate, polymer with water), (n-hexane), (cyclohexane)

Severe effects after repeated or prolonged exposure

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.

Aspiration hazard

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

Additional information on tests

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] | [d]	Species	Source
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol					
	Acute fish toxicity	LC50	10000 mg/l	96 h	Pimephales promelas	OECD Guideline 203
	Acute algae toxicity	ErC50	>100 mg/l	72 h	Scenedesmus subspicatus	
	Acute crustacea toxicity	EC50	13299 mg/l	48 h	Daphnia magna (Big water flea)	
	Acute bacteria toxicity	(>1000 mg/l)				
	Hydrocarbons, C6-C7, isoalkanes, cyclics, < 5% n-hexane					
	Acute fish toxicity	LC50	12 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50	55 mg/l	72 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50	3 mg/l	48 h	Daphnia magna (Big water flea)	
	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics					
	Acute fish toxicity	LC50	> 13,4 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203
	Acute algae toxicity	ErC50	12 mg/l	72 h	Selenastrum capricornutum	OECD Guideline 201
	Acute crustacea toxicity	EC50	3 mg/l	48 h	Daphnia magna	OECD Guideline 202
	Fish toxicity	NOEC	1,534 mg/l	28 d	Oncorhynchus mykiss	ECHA
	Crustacea toxicity	NOEC	1 mg/l	21 d	Daphnia magna	OECD Guideline 211
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane					
	Acute fish toxicity	LC50	11,4 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203
	Acute algae toxicity	ErC50	10 - 30 mg/l	72 h	Raphidocelis subcapitata	OECD Guideline 201
	Acute crustacea toxicity	EC50	3 mg/l	48 h	Daphnia magna	OECD Guideline 202
	Fish toxicity	NOEC	2,045 mg/l	28 d	Oncorhynchus mykiss	ECHA
	Crustacea toxicity	NOEC	1 mg/l	21 d	Daphnia magna	OECD Guideline 211
	Hydrocarbons, C6, isoalkanes, <5% n-hexane					
	Acute fish toxicity	LC50	18,27 mg/l	96 h	Oncorhynchus mykiss	ECHA
	Acute algae toxicity	ErC50	13,56 mg/l	72 h	Selenastrum capricornutum	ECHA
	Acute crustacea toxicity	EC50	31,9 mg/l	48 h	Daphnia magna	ECHA
	Fish toxicity	NOEC	4,089 mg/l	28 d	Oncorhynchus mykiss	ECHA
	Crustacea toxicity	NOEC	7,138 mg/l	21 d	Daphnia magna	ECHA
162303-51-7	Tetra-n-butyl titanate, polymer with water					
	Acute fish toxicity	LC50	2300 mg/l	96 h	Alburnus alburnus	Not stated. 96-h mor
	Acute algae toxicity	ErC50	> 820 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201
	Acute crustacea toxicity	EC50	590 mg/l	48 h	Daphnia magna	OECD Guideline 202
	Crustacea toxicity	NOEC	20 mg/l	21 d	Daphnia magna	"Recommendation of t
110-54-3	n-hexane					
	Acute fish toxicity	LC50	12,51 mg/l	96 h	Oncorhynchus mykiss	ECHA
	Acute algae toxicity	ErC50	9,285 mg/l	72 h	Selenastrum capricornutum	ECHA
	Acute crustacea toxicity	EC50	21,85 mg/l	48 h	Daphnia magna	ECHA
	Fish toxicity	NOEC	2,8 mg/l	28 d	Oncorhynchus mykiss	ECHA
	Crustacea toxicity	NOEC	4,888 mg/l	21 d	Daphnia magna	ECHA
110-82-7	cyclohexane					
	Acute fish toxicity	LC50	4,53 mg/l	96 h	Pimephales promelas	OECD Guideline 203
	Acute algae toxicity	ErC50	3,4 mg/l	72 h	Selenastrum capricornutum	OECD Guideline 201
	Acute crustacea toxicity	EC50	0,9 mg/l	48 h	Daphnia magna	OECD Guideline 202

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
	Biodegradation	95%	21	
	Readily biodegradable (according to OECD criteria).			
	Hydrocarbons, C6-C7, isoalkanes, cyclics, < 5% n-hexane			
	Biodegradation	98%	28	
	Readily biodegradable (according to OECD criteria).			
	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics			
	Biodegradation	98%	28	
	Readily biodegradable (according to OECD criteria).			
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane			
	Biodegradation	81%	28	
	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
106-97-8	butane	2,89
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	0,05
110-54-3	n-hexane	4

BCF

CAS No	Chemical name	BCF	Species	Source
	Hydrocarbons, C6, isoalkanes, <5% n-hexane	501,187	Pimephales promelas	ECHA
110-54-3	n-hexane	501.187	Pimephales promelas	ECHA
110-82-7	cyclohexane	242		ECHA

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. 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

Advice on disposal

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

Waste disposal number of waste from 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 dangerous substances
Classified as hazardous waste.

Contaminated packaging

Non-contaminated packages may be recycled.

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

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

Air transport (ICAO)

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: no

14.6. Special precautions for user

Warning: Flammable gases.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC):	90,725 % (553,42 g/l)
2004/42/EC (VOC):	92,4 % (563,641 g/l)
Subcategory according to Directive 2004/42/EC:	Special finishes - All types, VOC limit value: 840 g/l

Additional information

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC , 2008/47/EC

National regulatory information

Employment restrictions:	Observe employment restrictions for young people.
Water contaminating class (D):	1 - slightly water contaminating

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): 1,2,4,6,7,8,9,10,13,14,15.

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)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
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
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Relevant H- and EUH-phrases (Number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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.)