Safety Data Sheet

according to Regulation (EC) No 1907/2006

Lysoformin spezial

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

1.1. Product identifier

Lysoformin spezial

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

Use of the substance/mixture

For professional use.

1.3. Details of the supplier of the safety data sheet

Company name:	Lysoform Dr. Hans Rosemann GmbH	
Street:	Kaiser-Wilhem-Str. 133	
Place:	D-12247 Berlin	
Telephone:	+49 (0)30 / 77992-0	Telefax: +49-(0)30 / 77992-219
Contact person:	Wissenschaftlich-Technische Abteilung Berlin	Telephone: +49 (0)30 / 77992-208
E-mail:	kontakt@lysoform.de	
Internet:	www.lysoform.de	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 3; H226
Acute Tox. 4; H332
Skin Corr. 1B; H314
Eye Dam. 1; H318
Skin Sens. 1; H317
Aquatic Acute 1; H400
Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Isotridecanol, ethoxylated
didecyldimethylammonium chloride
polyhexamethylene biguinide hydrochloride

Signal word: Danger

Pictograms:



Hazard statements

H226	Flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
69011-36-5	Isotridecanol, ethoxylated			5 - < 10 %
	931-138-8			
	Acute Tox. 4, Eye Dam. 1; H302 H318			
7173-51-5	didecyldimethylammonium chloride			5 - < 10 %
	230-525-2	612-131-00-6		
	Acute Tox. 3, Skin Corr. 1B, Aquatic Acute 1, Aquatic Chronic 2; H301 H314 H400 H411			
67-63-0	propan-2-ol; isopropanol			1 - < 5 %
	200-661-7	603-117-00-0	01-2119457558-25	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			
1802181-67-4	polyhexamethylene biguinide hydrochloride			1 - < 5 %
	Acute Tox. 2, Acute Tox. 4, Eye Dam. 1, Skin Sens. 1B, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H330 H302 H318 H317 H335 H400 H410			
78-93-3	butanone; ethyl methyl ketone			< 0.1 %
	201-159-0	606-002-00-3		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			

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		
69011-36-5	931-138-8	Isotridecanol, ethoxylated	5 - < 10 %
	oral: ATE = 500 mg/kg		
7173-51-5	230-525-2	didecyldimethylammonium chloride	5 - < 10 %
	dermal: LD50 = 3342 mg/kg; oral: LD50 = 238 mg/kg Aquatic Acute 1; H400: M=10		
67-63-0	200-661-7	propan-2-ol; isopropanol	1 - < 5 %
	inhalation: LC50 = 37.5 mg/l (vapours); dermal: LD50 = 13900 mg/kg; oral: LD50 = 5840 mg/kg		
1802181-67-4		polyhexamethylene biguinide hydrochloride	1 - < 5 %
	inhalation: LC50 = mg/l (vapours); inhalation: LC50 = 0.322 mg/l (dusts or mists); inhalation: LC50 = ppm (gases); oral: LD50 = >400 mg/kg Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=10		

Labelling for contents according to Regulation (EC) No 648/2004

5 % - < 15 % non-ionic surfactants, disinfectants, perfumes (Hydroxycitronellal, Hexyl cinnamal, Linalool, Butylphenyl methylpropional).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Call a physician immediately. If medical advice is needed, have product container or label at hand.

After inhalation

Provide fresh air.

After contact with skin

Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of water.

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

Rinse mouth immediately and drink plenty of water. Call emergency telephone number.

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

none

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Carbon dioxide (CO2), alcohol resistant foam, Extinguishing powder

5.2. Special hazards arising from the substance or mixture

In case of fire: Nitrogen oxides (NOx) Carbon monoxide Carbon dioxide (CO2)

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

General advice

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.

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.

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

Provide adequate ventilation. To prepare a dilution, always first fill in the water and then add the product.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

Advice on general occupational hygiene

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

Further information on handling

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately. Avoid contact with eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container in a cool, well-ventilated place. Keep container dry. Avoid: Frost. Keep out of the reach of children.

Hints on joint storage

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

7.3. Specific end use(s)

none

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
64-17-5	Ethanol	1000	-		STEL (15 min)	
78-93-3	Methyl ethyl ketone (MEK) (Butan-2-one)	200	600		TWA (8 h)	
		300	900		STEL (15 min)	
67-63-0	Propan-2-ol	200	-		TWA (8 h)	
		400	-		STEL (15 min)	

Biological limit values

CAS No	Substance	Parameter	Value	Test material	Sampling time
67-63-0	2-Propanol	Acetone	40 mg/L	Urine	End of shift at end of workweek
78-93-3	Butan-2-one	Butan-2-one	70 µmol/L	Urine	Post shift

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
67-63-0	propan-2-ol; isopropanol			
Worker DNEL, long-term		inhalation	systemic	500 mg/m³
Worker DNEL, long-term		dermal	systemic	888 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	89 mg/m³
Consumer DNEL, long-term		dermal	systemic	319 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	26 mg/kg bw/day
64-17-5	ethanol, ethyl alcohol			
Worker DNEL, long-term		dermal	systemic	343 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	950 mg/m³
Worker DNEL, acute		inhalation	local	1900 mg/m³
Consumer DNEL, acute		inhalation	local	950 mg/m³
Consumer DNEL, long-term		inhalation	systemic	114 mg/m³
Consumer DNEL, long-term		oral	systemic	87 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	206 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
67-63-0	propan-2-ol; isopropanol	
Freshwater		140.9 mg/l
Marine water		140.9 mg/l
Freshwater sediment		552 mg/l
Marine sediment		552 mg/l
Microorganisms in sewage treatment plants (STP)		2251 mg/l
Soil		28 mg/l
64-17-5	ethanol, ethyl alcohol	
Freshwater		0.96 mg/l
Marine water		0.79 mg/kg
Freshwater sediment		3.6 mg/kg
Microorganisms in sewage treatment plants (STP)		580 mg/l
Soil		0.63 mg/kg

8.2. Exposure controls





Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly sealed safety glasses.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four

control digits.
Recommendation:
NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)
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.

To prevent skin irritation in the professional field - regardless of actual contact with disinfectants - it is recommended to use: • a fast absorbing skin care cream in between if necessary. • a greasy cream after washing at the end of work or before breaks.

Skin protection

Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless - light yellow
Odour:	characteristic

		Test method
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	not determined	
Flammability:	not applicable not applicable	
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Flash point:	50 °C	DIN 51755
Decomposition temperature:	not determined	
pH-Value (at 20 °C):	ca. 8 (50 g/l H2O)	
Water solubility:	very soluble	
Solubility in other solvents not determined		
Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	not determined	
Density (at 20 °C):	ca. 1.0 g/cm³	
Relative vapour density:	not determined	
Particle characteristics:	not determined	

9.2. Other information

Information with regard to physical hazard classes

Self-ignition temperature	
Solid:	not applicable
Gas:	not applicable

Oxidizing properties
Not oxidising.

Other safety characteristics

Evaporation rate:	not determined
Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable. No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Flammable. No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Safe handling: see section 7

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Harmful if inhaled.

ATEmix tested

	Dose	Species	Source
LD50, oral	4000 mg/kg	Rat	
LD50, dermal	> 8000 mg/kg	Rat	

ATEmix calculated

ATE (inhalation vapour) 17.24 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
69011-36-5	Isotridecanol, ethoxylated					
	oral	ATE mg/kg	500			
7173-51-5	didecyldimethylammonium chloride					
	oral	LD50 mg/kg	238	Rat		OECD 410
	dermal	LD50 mg/kg	3342	Rabbit		
67-63-0	propan-2-ol; isopropanol					
	oral	LD50 mg/kg	5840	Rat		
	dermal	LD50 mg/kg	13900	Rabbit		
	inhalation (4 h) vapour	LC50	37.5 mg/l	Rat		OECD 403
1802181-67-4	polyhexamethylene biguinide hydrochloride					
	oral	LD50 mg/kg	>400	Rat		OECD 423
	inhalation (4 h) vapour	LC50	mg/l			
	inhalation (4 h) dust/mist	LC50 mg/l	0.322	Rat		OECD 403
	inhalation (4 h) gas	LC50	ppm			

Irritation and corrosivity

Skin corrosion/irritation: Causes severe skin burns and eye damage.
Serious eye damage/eye irritation: Causes serious eye damage.
Didecyldimethylammoniumchloride:
In case of skin contact: OECD 404 Rabbit 3 min: Irritant

Polyhexamethylenbiguanid-HCl
In case of skin contact: OECD 404 Rabbit - slightly irritant
Risk of serious damage to eyes. OECD 405 Rabbit

Sensitising effects

May cause an allergic skin reaction. (polyhexamethylene biguinide hydrochloride)
Didecyldimethylammoniumchloride:
Buehler Test US-EPA Guinea pig: negative

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.
Didecyldimethylammoniumchloride:
negative OECD 471 (Ames test) , Salmonella typhimurium
negative Gene mutation , CHO-cells
negative Chromosomal aberrations Test, CHO-cells
negative Chromosomal aberrations Test oral Rat OECD 475

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.

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

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

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Oncorhynchus mykiss (Rainbow trout) (OECD 203) / 96 h: LC50: 10 ppm; LC0: 4 ppm
Daphnia (OECD 202 Part I) / 48 h: LC50: 1.1 ppm
(OECD 201) / 72 h: EC50 24 h = 100 ppm; EC50 48 h = 45 ppm; EC50 72 h = 8.3 ppm

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
69011-36-5	Isotridecanol, ethoxylated						
	Acute fish toxicity	LC50	1 - 10 mg/l	96 h	Cyprinus carpio (Common Carp)		
	Acute algae toxicity	ErC50	1 - 10 mg/l	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50	1 - 10 mg/l	48 h			
	Acute bacteria toxicity	EC50	140 mg/l ( )		Activated sludge		
7173-51-5	didecyldimethylammonium chloride						
	Acute fish toxicity	LC50	0.19 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50	0.026 mg/l	96 h	Pseudokirchneriella subcapitata		OECD 201
	Acute crustacea toxicity	EC50	0.062 mg/l	48 h	Daphnia magna (Big water flea)		OECD 211
	Fish toxicity	NOEC	0.032 mg/l	34 d	Danio rerio		OECD 210
	Crustacea toxicity	NOEC	0.016 mg/l	21 d	Daphnia magna (Big water flea)		OECD 211
	Acute bacteria toxicity	EC50	11 mg/l ( )	3 h	Activated sludge		OECD 209
67-63-0	propan-2-ol; isopropanol						
	Acute fish toxicity	LC50	9640 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50	>100 mg/l	72 h	Selenastrum capricornutum		
	Acute crustacea toxicity	EC50	9714 mg/l	48 h	Daphnia magna (Big water flea)		
	Acute bacteria toxicity	EC50	> 100 mg/l ( )				
1802181-67-4	polyhexamethylene biguinide hydrochloride						
	Acute fish toxicity	LC50	0.321 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50	0.0206 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50	0.156 mg/l	48 h	Daphnia magna (Big water flea)		
	Fish toxicity	NOEC	0.00498 mg/l	28 d	Pimephales promelas (fathead minnow)		
	Crustacea toxicity	NOEC	0.00544 mg/l	21 d	Daphnia magna (Big water flea)		

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
69011-36-5	Isotridecanol, ethoxylated			
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	>60%	28	
	Readily biodegradable (according to OECD criteria).			
7173-51-5	didecyldimethylammonium chloride			
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	72%	28	
	Readily biodegradable (according to OECD criteria).			
	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	93.3	28	
	OECD 303/ EEC 92/69/V, C10	91%	70	
67-63-0	propan-2-ol; isopropanol			
		53%	5	
	Readily biodegradable.			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-63-0	propan-2-ol; isopropanol	0.05

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 REACH, annex XIII.

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

List of Wastes Code - residues/unused products

070601 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; aqueous washing liquids and mother liquors; hazardous waste

List of Wastes Code - contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 2924

14.2. UN proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (didecyldimethylammonium chloride, propan-2-ol; isopropyl alcohol; isopropanol)

14.3. Transport hazard class(es): 3 (8)

14.4. Packing group: III

Hazard label: 3+8



Classification code:	FC
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	38
Tunnel restriction code:	D/E

Marine transport (IMDG)

14.1. UN number or ID number: UN 2924

14.2. UN proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (didecyldimethylammonium chloride, isopropanol)

14.3. Transport hazard class(es): 3 (8)

14.4. Packing group: III

Hazard label: 3+8



Special Provisions:	223, 274
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-E, S-C

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 2924

14.2. UN proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (didecyldimethylammonium chloride, isopropanol)

14.3. Transport hazard class(es): 3 (8)

14.4. Packing group: III

Hazard label: 3+8



Special Provisions:	A3 A803
Limited quantity Passenger:	1 L
Passenger LQ:	Y342
Excepted quantity:	E1
IATA-packing instructions - Passenger:	354
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	365
IATA-max. quantity - Cargo:	60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Marine pollutant: No

14.6. Special precautions for user

No information available.

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

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):	3 - highly hazardous to water
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

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): 2,9,11,12,14,15.

Abbreviations and acronyms

Flam. Liq. 2: Flammable liquids, hazard category 2
Flam. Liq. 3: Flammable liquids, hazard category 3
Acute Tox. 2: Acute toxicity, hazard category 2
Acute Tox. 3: Acute toxicity, hazard category 3
Acute Tox. 4: Acute toxicity, hazard category 4
Skin Corr. 1B: Skin corrosion, sub-category 1B
Eye Dam. 1: Serious eye damage, hazard category 1
Eye Irrit. 2: Eye irritation, hazard category 2
Skin Sens. 1: Skin sensitisation, hazard category 1
Skin Sens. 1B: Skin sensitisation, hazard category 1B
STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3
Aquatic Acute 1: Hazardous to the aquatic environment, hazard category: Acute 1
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard category: Chronic 1
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard category: Chronic 2
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%

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 3; H226	On basis of test data
Acute Tox. 4; H332	Calculation method
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

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