Dibutylamine solution 0.2 mol/l - 0.2 N solution in dimethylformamide

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

1.1. Product identifier

Dibutylamine solution 0.2 mol/l - 0.2 N solution in dimethylformamide

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

Use of the substance/mixture

Laboratory chemicals
Industrial uses: Uses of substances as such or in preparations at industrial sites
Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Company name:	AnalytiChem GmbH ACD		
Street:	Stempelstraße 6		
Place:	D-47167 Duisburg		
Telephone:	0203/5194-0	Telefax:	0203/5194-290
E-mail:	info@analytichem.de		
Contact person:	Abteilung Produktsicherheit	Telephone:	0203/5194-107/117
E-mail:	produktsicherheit@analytichem.de		
Internet:	www.analytichem.de		
Responsible Department:	Abteilung Produktsicherheit		

1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

Further Information

This product is a mixture. REACH Registration Number see section 3.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 3; H226
Repr. 1B; H360D
Acute Tox. 3; H331
Acute Tox. 4; H312
Skin Irrit. 2; H315
Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

N,N-dimethylformamide
di-n-butylamine

Signal word: Danger

Pictograms:

Hazard statements

H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H360D	May damage the unborn child.

Precautionary statements

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing and eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P403+P235	Store in a well-ventilated place. Keep cool.

Special labelling of certain mixtures

EUH071	Corrosive to the respiratory tract. Restricted to professional users.

2.3. Other hazards

No data 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)			
68-12-2	N,N-dimethylformamide			95 - < 100 %
	200-679-5	616-001-00-X	01-2119475605-32	
	Flam. Liq. 3, Repr. 1B, Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H226 H360D H332 H312 H319			
111-92-2	di-n-butylamine			1 - < 5 %
	203-921-8	612-049-00-0	01-2119475606-30	
	Flam. Liq. 3, Acute Tox. 2, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1A, Eye Dam. 1; H226 H330 H311 H301 H314 H318 EUH071			

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		
68-12-2	200-679-5	N,N-dimethylformamide	95 - < 100 %
	inhalation: LC50 = > 5,85 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = > 3160 mg/kg; oral: LD50 = 3010 mg/kg		
111-92-2	203-921-8	di-n-butylamine	1 - < 5 %
	inhalation: ATE 1,2 mg/l (vapours); dermal: ATE 300 mg/kg; oral: ATE 220 mg/kg		

Further Information

This mixture contains the following substances of very high concern (SVHC) which are included in the

Candidate List according to Article 59 of REACH: Dimethylformamide

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Self-protection of the first aider

After inhalation

Provide fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Call a physician immediately.

After contact with skin

Wash immediately with: Water
Take off immediately all contaminated clothing and wash it before reuse.
Call a physician immediately.

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.
Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Rinse mouth immediately and drink plenty of water.
Call a physician immediately.

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

Irritant

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam
Carbon dioxide (CO_2)
Extinguishing powder

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Combustible liquids
Hazardous combustion products
In case of fire may be liberated:
Nitrogen oxides (NOx)
Vapours are heavier than air, spread along floors and form explosive mixtures with air.
Heating causes rise in pressure with risk of bursting.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.
In case of fire and/or explosion do not breathe fumes.
Avoid contact with skin, eyes and clothes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Move undamaged containers from immediate hazard area if it can be done safely.
Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Keep away from sources of ignition - No smoking.
This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe).
Take action to prevent static discharges.

For non-emergency personnel

Provide adequate ventilation.
Use personal protection equipment.
Avoid contact with skin, eyes and clothes.
Remove persons to safety.
Emergency procedures
Consult an expert
Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.
The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.
Danger of explosion

6.3. Methods and material for containment and cleaning up

For containment

Cover drains.
Prevent spread over a wide area (e.g. by containment or oil barriers).
Collect in closed and suitable containers for disposal.
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

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

Avoid exposure - obtain special instructions before use.
Read label before use. Handle and open container with care.
When using do not eat, drink, smoke, sniff. Keep container tightly closed.
Use personal protection equipment. Use extractor hood (laboratory).
Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation.

Advice on protection against fire and explosion

Take action to prevent static discharges. Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs.
The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

Further information on handling

Take off immediately all contaminated clothing and wash it before reuse.
Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. If handled uncovered, arrangements with local exhaust ventilation have to be used.
Store in a place accessible by authorized persons only.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a cool, well-ventilated place.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

national regulations

Further information on storage conditions

Keep container tightly closed.
Keep cool. Protect from sunlight.

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
68-12-2	Dimethylformamide	5	15		TWA (8 h)	
		10	30		STEL (15 min)	

Biological limit values

CAS No	Substance	Parameter	Value	Test material	Sampling time
68-12-2	N,N-Dimethylformamide	N-Methylformamide	15 mg/L	Urine	Post shift

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
68-12-2	N,N-dimethylformamide			
Worker DNEL, long-term		inhalation	systemic	6 mg/m³
Worker DNEL, long-term		dermal	systemic	1,1 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,1 mg/m³
Consumer DNEL, long-term		oral	systemic	0,16 mg/kg bw/day
Worker DNEL, acute		inhalation	local	30 mg/m³
Worker DNEL, acute		dermal	systemic	26,3 mg/kg bw/day
Consumer DNEL, acute		inhalation	systemic	30 mg/m³
Worker DNEL, long-term		inhalation	local	15 mg/m³
Worker DNEL, acute		inhalation	systemic	30 mg/m³
Consumer DNEL, acute		oral	systemic	5,94 mg/kg bw/day
Consumer DNEL, acute		inhalation	local	30 mg/m³
Consumer DNEL, acute		dermal	systemic	15,8 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	1,98 mg/kg bw/day
Consumer DNEL, long-term		inhalation	local	15 mg/m³
111-92-2	di-n-butylamine			
Worker DNEL, long-term		inhalation	systemic	29 mg/m³
Worker DNEL, acute		inhalation	systemic	29 mg/m³
Worker DNEL, long-term		inhalation	local	29 mg/m³
Worker DNEL, acute		inhalation	local	29 mg/m³

PNEC values

CAS No	Substance	
Environmental compartment		Value
68-12-2	N,N-dimethylformamide	
Freshwater		30 mg/l
Freshwater (intermittent releases)		30 mg/l
Marine water		3 mg/l
Freshwater sediment		111 mg/kg
Marine sediment		11,1 mg/kg
Micro-organisms in sewage treatment plants (STP)		44 mg/l
Soil		56,97 mg/kg
111-92-2	di-n-butylamine	
Freshwater		0,084 mg/l
Freshwater (intermittent releases)		0,084 mg/l
Marine water		0,008 mg/l
Freshwater sediment		11,4 mg/kg
Marine sediment		1,14 mg/kg
Micro-organisms in sewage treatment plants (STP)		149,5 mg/l
Soil		2,23 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

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

Individual protection measures, such as personal protective equipment

Eye/face protection

goggles

Face protection umbrella

Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact: No data available

By short-term hand contact
Trade name/designation KCL 890 Vitoject®
Suitable material: FKM (fluoro rubber) 0,7 mm
Wearing time with occasional contact (splashes): > 240 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

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

Wear fire resistant or flame retardant clothing.

Wash hands and face before breaks and after work and take a shower if necessary.

Draw up and observe skin protection programme.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal hazards

No data available

Environmental exposure controls

Do not allow to enter into surface water or drains.
Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.
Danger of explosion

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	colourless	
Odour:	like: Amines	
Odour threshold:	No data available	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and boiling range:		~153 °C
Flammability:		No data available
Lower explosion limits:		No data available
Upper explosion limits:		No data available
Flash point:		~57,5 °C
Auto-ignition temperature:		No data available
Decomposition temperature:		No data available
pH-Value:		No data available
Viscosity / kinematic:		No data available
Water solubility:		No data available

Solubility in other solvents

No data available

Dissolution rate:	No data available
Partition coefficient n-octanol/water:	No data available
Dispersion stability:	No data available
Vapour pressure:	No data available
Vapour pressure:	No data available
Density:	0,94 g/cm³
Relative density:	No data available
Bulk density:	No data available
Relative vapour density:	No data available
Particle characteristics:	No data available

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Sustained combustibility:	No data available

Self-ignition temperature

Solid:	No data available
Gas:	No data available

Oxidizing properties

No data available

Other safety characteristics

Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	No data available
Solid content:	0%
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
	No data available
Viscosity / dynamic:	No data available
Flow time:	No data available

Further Information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

In case of warming:
Vapours may form explosive mixtures with air.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Oxidising agent
Alkali metals
Reducing agent
Isocyanates
Phosphorus oxides
Bromine
Chlorine
permanganates, e.g. potassium permanganate
NO3, Na

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Plastic articles
copper
Copper alloys
Tin

10.6. Hazardous decomposition products

SECTION 5: Firefighting measures

Further information

No data available

SECTION 11: Toxicological information

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

Toxicocinetics, metabolism and distribution

Avoid exposure - obtain special instructions before use.

Acute toxicity

Toxic if inhaled.
Harmful in contact with skin.
Mucous membrane irritation in the mouth, throat, esophagus and gastrointestinal tract.

ATEmix calculated

ATE (oral) > 5000 mg/kg; ATE (dermal) 1021 mg/kg; ATE (inhalation vapour) 8,900 mg/l; ATE (inhalation dust/mist) 0,8160 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
68-12-2	N,N-dimethylformamide				
	oral	LD50 3010 mg/kg	Rat	also cited in OECD SIDS Dimethylformamid	OECD Guideline 401
	dermal	LD50 > 3160 mg/kg	Rabbit	Study report (1978)	OECD Guideline 405
	inhalation (4 h) vapour	LC50 > 5,85 mg/l	Rat	also cited in OECD SIDS Dimethylformamid	OECD Guideline 403
	inhalation dust/mist	ATE 1,5 mg/l			
111-92-2	di-n-butylamine				
	oral	ATE 220 mg/kg			
	dermal	ATE 300 mg/kg			
	inhalation vapour	ATE 1,2 mg/l			

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Causes serious eye irritation.
Corrosive to the respiratory tract.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

May damage the unborn child. (N,N-dimethylformamide)
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.
Damage to:
kidneys
liver

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.

Information on likely routes of exposure

There are no data available on the mixture itself.

Specific effects in experiment on an animal

There are no data available on the mixture itself.

Additional information on tests

There are no data available on the mixture itself.

Practical experience

There are no data available on the mixture itself.

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

There are no data available on the mixture itself.

Further information

Headache
Dizziness
Dizziness

SECTION 12: Ecological information

12.1. Toxicity

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

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
68-12-2	N,N-dimethylformamide						
	Acute fish toxicity	LC50	7100 mg/l	96 h	Lepomis macrochirus	REACh Registration Dossier	other: US EPA guideline 660/3-75-009
	Acute algae toxicity	ErC50	> 1000 mg/l	72 h	Desmodesmus subspicatus	REACh Registration Dossier	other: DIN 38412, part 9, "Determination
	Acute crustacea toxicity	EC50	13100 mg/l	48 h	Daphnia magna	REACh Registration Dossier	OECD Guideline 202
	Fish toxicity	NOEC	> 102 mg/l	21 d	Oryzias latipes	REACh Registration Dossier	OECD Guideline 204
	Algae toxicity	NOEC	940 mg/l	14 d	Raphidocelis subcapitata	Bull. Environ. Contam. Toxicol. 31, 98-1	other: EPA-600/9-78-01 8
	Crustacea toxicity	NOEC	1500 mg/l	21 d	Daphnia magna	REACh Registration Dossier	Semi-Static toxicity test
111-92-2	di-n-butylamine						
	Acute fish toxicity	LC50	5,5 mg/l	96 h	Oncorhynchus mykiss	Chemosphere 9, 753-762 (1980)	other: IRSA, Quaderni dell'Instituto di
	Acute algae toxicity	ErC50	16,91 mg/l	72 h	Desmodesmus subspicatus	Study report (1988)	other: DIN 38412, part 9
	Acute crustacea toxicity	EC50	8,4 mg/l	48 h	Ceriodaphnia dubia	Study report (1994)	other: Standard guide for conducting acu
	Crustacea toxicity	NOEC	4,2 mg/l	21 d	Daphnia magna	Publication (1999)	OECD Guideline 211

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
68-12-2	N,N-dimethylformamide	-0,85
111-92-2	di-n-butylamine	2,1

BCF

CAS No	Chemical name	BCF	Species	Source
68-12-2	N,N-dimethylformamide	0,3 - 1,2	Cyprinus carpio	REACh Registration D
111-92-2	di-n-butylamine	21	fish	United States Enviro

12.4. Mobility in soil

There are no data available on the mixture itself.

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.

12.6. 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

Do not allow to enter into surface water or drains.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
Send to a physico-chemical treatment facility under observation of official regulations.
Do not empty into drains.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1992
14.2. UN proper shipping name:	FLAMMABLE LIQUID, TOXIC, N.O.S. (N,N-dimethylformamide, di-n-butylamine)
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3+6.1
Classification code:	FT1
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	36
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 1992

14.2. UN proper shipping name:	FLAMMABLE LIQUID, TOXIC, N.O.S. (N,N-dimethylformamide, di-n-butylamine)
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3+6.1
Classification code:	FT1
Special Provisions:	274 802
Limited quantity:	5 L
Excepted quantity:	E1

Marine transport (IMDG)

14.1. UN number or ID number:	UN 1992
14.2. UN proper shipping name:	FLAMMABLE LIQUID, TOXIC, N.O.S. (N,N-dimethylformamide, di-n-butylamine)
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3+6.1
Special Provisions:	223, 274
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 1992
14.2. UN proper shipping name:	FLAMMABLE LIQUID, TOXIC, N.O.S. (N,N-dimethylformamide, di-n-butylamine)
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3+6.1
Special Provisions:	A3
Limited quantity Passenger:	2 L
Passenger LQ:	Y343
Excepted quantity:	E1
IATA-packing instructions - Passenger:	355
IATA-max. quantity - Passenger:	60 L
IATA-packing instructions - Cargo:	366
IATA-max. quantity - Cargo:	220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

SECTION 15: Regulatory information

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

EU regulatory information

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):
N,N-dimethylformamide

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 30, Entry 40, Entry 75

Information according to Directive 2012/18/EU (SEVESO III): H2 ACUTE TOXIC

Additional information: P5c

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. Observe employment restrictions for women of child-bearing age.
Water hazard class (D):	2 - obviously hazardous to water

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,8,9,11.

Abbreviations and acronyms

Flam. Liq: Flammable liquid
Acute Tox: Acute toxicity
Skin Corr: Skin corrosion
Skin Irrit: Skin irritation
Eye Dam: Eye damage
Eye Irrit: Eye irritation
Repr: Reproductive toxicity

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
Repr. 1B; H360D	Calculation method
Acute Tox. 3; H331	Calculation method
Acute Tox. 4; H312	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H360D	May damage the unborn child.
EUH071	Corrosive to the respiratory tract.

Further Information

Provide appropriate information, instructions and training to users
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 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.)