

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Dibutylamine solution 0.1 mol/l - 0.1 N solution in xylene

Revision date: 28.02.2024

Product code: 19252

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

1.1. Product identifier

Dibutylamine solution 0.1 mol/l - 0.1 N solution in xylene

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
Acute Tox. 3; H331
Acute Tox. 4; H312
Asp. Tox. 1; H304
Skin Irrit. 2; H315
Eye Irrit. 2; H319
STOT SE 3; H335
STOT RE 2; H373

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

xylene (mix)
di-n-butylamine

Signal word: Danger

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Pictograms:



Hazard statements

- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H335 May cause respiratory irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P331 Do NOT induce vomiting.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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)			
	xylene (mix)			95 - < 100 %
	905-588-0	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; H226 H332 H312 H315 H319 H335 H373 H304			
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. 4, Skin Corr. 1A; H226 H330 H311 H302 H314			

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

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Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
	905-588-0	xylene (mix)	95 - < 100 %
		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	
111-92-2	203-921-8	di-n-butylamine	1 - < 5 %
		inhalation: LC50 = 218 mg/l (vapours); inhalation: ATE = 0,05 mg/l (dusts or mists); dermal: LD50 = 768 mg/kg; oral: LD50 = 550 mg/kg	

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No data available

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.

After ingestion

Observe risk of aspiration if vomiting occurs.
Call a physician immediately.

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

Irritant
Dizziness
Vapours may cause drowsiness and dizziness.
Headache
Agitation
Spasms
Anaesthetic state
Gastrointestinal complaints
Vomiting
Conjunctival oedema (chemosis).
Unconsciousness
corrosive
Cough
Dyspnoea
Risk of serious damage to eyes.

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

No data available

SECTION 5: Firefighting measures

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5.1. Extinguishing media

Suitable extinguishing media

Foam
Carbon dioxide (CO₂)
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:
Hydrogen cyanide (hydrocyanic acid)
Nitrogen oxides (NO_x)
Carbon dioxide (CO₂) Carbon monoxide
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
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).

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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

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.

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.

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.

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/m ³	fib/cm ³	Category	Origin
1330-20-7	Xylene, mixed isomers	50	221		TWA (8 h)	
		100	442		STEL (15 min)	

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DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
	xylene (mix)		
Worker DNEL, long-term	inhalation	systemic	221 mg/m ³
Worker DNEL, acute	inhalation	systemic	442 mg/m ³
Worker DNEL, long-term	inhalation	local	221 mg/m ³
Worker DNEL, acute	inhalation	local	442 mg/m ³
Worker DNEL, long-term	dermal	systemic	212 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	65,3 mg/m ³
Consumer DNEL, acute	inhalation	systemic	260 mg/m ³
Consumer DNEL, long-term	inhalation	local	65,3 mg/m ³
Consumer DNEL, acute	inhalation	local	260 mg/m ³
Consumer DNEL, long-term	dermal	systemic	125 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	12,5 mg/kg bw/day
111-92-2	di-n-butylamine		
Worker DNEL, long-term	inhalation	systemic	29 mg/m ³
Worker DNEL, acute	inhalation	systemic	29 mg/m ³
Worker DNEL, long-term	inhalation	local	29 mg/m ³
Worker DNEL, acute	inhalation	local	29 mg/m ³

PNEC values

CAS No	Substance	
Environmental compartment	Value	
	xylene (mix)	
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	
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.

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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
Trade name/designation KCL 890 Vitoject®
Suitable material: FKM (fluoro rubber) 0,7 mm
Wearing time with permanent contact: > 480 min

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): > 480 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.

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:	characteristic	
Odour threshold:	No data available	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and boiling range:		>35 °C
Flammability:		No data available
Lower explosion limits:		No data available
Upper explosion limits:		No data available
Flash point:		>23 °C
Auto-ignition temperature:		No data available
Decomposition temperature:		No data available
pH-Value:		No data available

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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:	0,86 g/cm ³
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.

Sustaining combustion:

Sustaining combustion

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:

No data available

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

Sulphuric acid, concentrated

SULPHUR

Nitric acid

Acids

Alcohols

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Ketone
aldehydes
ester
Nitriles
Phenols

10.4. Conditions to avoid

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

10.5. Incompatible materials

Light metal
Rubber articles
plastic
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

Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

Acute toxicity

Toxic if inhaled.
Harmful in contact with skin.
If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).
Pulmonary oedema
Pneumonia

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) 1093 mg/kg; ATE (inhalation vapour) 8,360 mg/l; ATE (inhalation dust/mist) 1,044 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
	xylene (mix)				
	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			
111-92-2	di-n-butylamine				
	oral	LD50 550 mg/kg	Rat	Publication (1954)	Evaluation of acute oral toxicity after
	dermal	LD50 768 mg/kg	Rabbit	Publication (1954)	according to Draize et al.
	inhalation (4 h) vapour	LC50 218 mg/l	Rat	Study report (1987)	OECD Guideline 403
	inhalation dust/mist	ATE 0,05 mg/l			

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Irritation and corrosivity

- Causes skin irritation.
- Causes serious eye irritation.
- Has degreasing effect on the skin.

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.

STOT-single exposure

- May cause respiratory irritation. (xylene (mix))
- kidneys
- liver
- central nervous system

STOT-repeated exposure

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

Aspiration hazard

May be fatal if swallowed and enters airways.

Information on likely routes of exposure

There are no data available on the preparation/mixture itself.

Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

Additional information on tests

There are no data available on the preparation/mixture itself.

Practical experience

There are no data available on the preparation/mixture itself.

11.2. Information on other hazards

Endocrine disrupting properties

There are no data available on the preparation/mixture itself.

Other information

No data available

Further information

- Irritant
- Dizziness
- Vapours may cause drowsiness and dizziness.
- Headache
- Agitation
- Spasms
- Anaesthetic state
- Gastrointestinal complaints
- Vomiting
- Conjunctival oedema (chemosis).
- Unconsciousness
- corrosive
- Cough
- Dyspnoea
- Risk of serious damage to eyes.

SECTION 12: Ecological information

12.1. Toxicity

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

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
	xylene (mix)					
	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 mg/l > 3,4	48 h	Ceriodaphnia dubia	Ecotoxicology and Environmental Safety 3	other: US EPA 600/4-91-003
	Fish toxicity	NOEC mg/l > 1,3	56 d	Oncorhynchus mykiss	Appl. Sci. Branch, Eng. Res. Cent. Denve	Fish were exposed in artificial streams
	Crustacea toxicity	NOEC mg/l 1,17	7 d	Ceriodaphnia dubia	Ecotoxicology and Environmental Safety 3	other: US EPA 600/4-91-003
	Acute bacteria toxicity	EC50 mg/l () > 175	0,5 h	Activated sludge	Research Journal WPCF 60(10) 1850-1856 (OECD Guideline 209
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 mg/l 16,91	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

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
	xylene (mix)	3,2
111-92-2	di-n-butylamine	2,1

BCF

CAS No	Chemical name	BCF	Species	Source
	xylene (mix)	> 5,5 - < 12,2	Oncorhynchus mykiss	Appl. Sci. Branch, E
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.

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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. (xylene (mix), 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. (xylene (mix), 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. (xylene (mix), 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)

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14.1. UN number or ID number:	UN 1992
14.2. UN proper shipping name:	FLAMMABLE LIQUID, TOXIC, N.O.S. (xylene (mix), 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

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

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.

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): 12.

Abbreviations and acronyms

Flam. Liq: Flammable liquid

Acute Tox: Acute toxicity

Asp. Tox: Aspiration hazard

Skin Corr: Skin corrosion

Skin Irrit: Skin irritation

Eye Irrit: Eye irritation

STOT SE: Specific target organ toxicity - single exposure

STOT RE: Specific target organ toxicity - repeated exposure

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Dibutylamine solution 0.1 mol/l - 0.1 N solution in xylene

Revision date: 28.02.2024

Product code: 19252

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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. 3; H331	Calculation method
Acute Tox. 4; H312	Calculation method
Asp. Tox. 1; H304	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
STOT SE 3; H335	Calculation method
STOT RE 2; H373	Calculation method

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
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.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

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 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.)