

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

Revision date: 28.02.2024

Product code: 24113

Page 1 of 14

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 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	For Hazardous Materials [or Danger	ous Goods] Incidents Spill, Leak, Fire,
number:	Exposure, or Accident Call CHEMT	REC Day or Night Within USA and Canada:
	1-800-424-9300 Outside USA and 0	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

Revision No: 1,04 - Replaces version: 1,03



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

Revision date: 28.02.2024

Pictograms:

Product code: 24113

Page 2 of 14



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.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P403+P235	Store in a well-ventilated place. Keep cool.

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)			
	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			
	Flam. Liq. 3, Acute Tox. 2, Acut H314			

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				
	905-588-0 xylene (mix)				
	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



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

Revision date: 28.02.2024

Product code: 24113

Page 3 of 14

(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

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:



according to Regulation (EC) No 1907/2006

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

Revision date: 28.02.2024

Product code: 24113

Page 4 of 14

Hydrogen cyanide (hydrocyanic acid)

Nitrogen oxides (NOx)

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).

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



according to Regulation (EC) No 1907/2006

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

Revision date: 28.02.2024

Product code: 24113

Page 5 of 14

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/m³	fib/cm ³	Category	Origin
1330-20-7	Xylene, mixed isomers	50	221		TWA (8 h)	
		100	442		STEL (15 min)	



according to Regulation (EC) No 1907/2006

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

Revision date: 28.02.2024

Product code: 24113

Page 6 of 14

DNEL/DMEL values

CAS No	Substance						
DNEL type	Effect	Value					
	xylene (mix)						
Worker DNE	L, long-term	inhalation	systemic	221 mg/m ³			
Worker DNE	L, acute	inhalation	systemic	442 mg/m ³			
Worker DNE	L, long-term	inhalation	local	221 mg/m ³			
Worker DNE	L, acute	inhalation	local	442 mg/m ³			
Worker DNE	L, long-term	dermal	systemic	212 mg/kg bw/day			
Consumer D	NEL, long-term	inhalation	systemic	65,3 mg/m³			
Consumer D	NEL, acute	inhalation	systemic	260 mg/m³			
Consumer D	NEL, long-term	inhalation	local	65,3 mg/m³			
Consumer D	NEL, acute	inhalation	local	260 mg/m³			
Consumer D	NEL, long-term	dermal	systemic	125 mg/kg bw/day			
Consumer DI	NEL, long-term	oral	systemic	12,5 mg/kg bw/day			
111-92-2	di-n-butylamine						
Worker DNE	L, long-term	inhalation	systemic	29 mg/m³			
Worker DNE	L, acute	inhalation	systemic	29 mg/m³			
Worker DNE	L, long-term	inhalation	local	29 mg/m³			
Worker DNE	L, acute	inhalation	local	29 mg/m³			

PNEC values

CAS No	Substance	
Environmen	tal compartment	Value
	xylene (mix)	
Freshwater		0,327 mg/l
Freshwater	(intermittent releases)	0,327 mg/l
Marine wate	r	0,327 mg/l
Freshwater	sediment	12,46 mg/kg
Marine sedi	nent	12,46 mg/kg
Micro-organ	isms 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 wate	r	0,008 mg/l
Freshwater	sediment	11,4 mg/kg
Marine sedi	nent	1,14 mg/kg
Micro-organ	isms 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.



according to Regulation (EC) No 1907/2006

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

Revision date: 28.02.2024

Product code: 24113

Page 7 of 14

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: Colour: Odour:	Liquid colourless characteristic	
Odour threshold:	No data available	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and		>35 °C
boiling range:		
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



Dibutylamine solution 0.2 mol/l - 0.2 N solution in xylene Product code: 24113 Revision date: 28.02.2024 Page 8 of 14 Viscosity / kinematic: No data available No data available Water solubility: Solubility in other solvents No data available No data available Dissolution rate: 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/cm³ Relative density: No data available Bulk density: No data available No data available Relative vapour density: 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 No data available Evaporation rate: 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 No data available Pour point: 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



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

Revision date: 28.02.2024

Product code: 24113

Page 9 of 14

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

Toxicocinetics, 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) 1086 mg/kg; ATE (inhalation vapour) 6,770 mg/l; ATE (inhalation dust/mist) 0,8050 mg/l

CAS No	Chemical name	Chemical name							
	Exposure route	Dose		Species	Source	Method			
	xylene (mix)								
	oral	LD50 mg/kg	3523	Rat	Study report (1986)	EU Method B.1			
	dermal	LD50 mg/kg	12126	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 mg/kg	550	Rat	Publication (1954)	Evaluation of acute oral toxicity after			
	dermal	LD50 mg/kg	768	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						



according to Regulation (EC) No 1907/2006

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

Revision date: 28.02.2024

Product code: 24113

Page 10 of 14

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

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

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.



according to Regulation (EC) No 1907/2006

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

Revision date: 28.02.2024

Product code: 24113

Page 11 of 14

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

There are no data available on the mixture itself.

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



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

Revision date: 28.02.2024

Product code: 24113

Page 12 of 14

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)

Land transport (ADIVIVID)	
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
· · ·	



Dibutylamine solution 0.2 mol/I - 0.2 N solution in xylene

Revision date: 28.02.2024	Product code: 24113	Page 13 of 14
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. (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		

ELL regulatory information

Water hazard class (D):	2 - obviously hazardous to water
	work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile
National regulatory information	
Additional information:	P5c
2012/18/EU (SEVESO III):	
Entry 3, Entry 40 Information according to Directive	H2 ACUTE TOXIC
Restrictions on use (REACH, annex XVII):	
EU regulatory information	

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



according to Regulation (EC) No 1907/2006

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

Revision date: 28.02.2024

Product code: 24113

Page 14 of 14

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.)