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

1.1 Product identifier

Trade name : gigasept® AF

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

Use of the Substance/Mixture : Disinfectants

Recommended restrictions on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Manufacturer/ Supplier : Schülke & Mayr GmbH
Robert-Koch-Str. 2

22851 Norderstedt
Germany
Telephone: +49 (0)40/ 52100-0
Telefax: +49 (0)40/ 52100318
mail@schuelke.com
www.schuelke.com

E-mail address of person responsible for the SDS/Contact person : Application Department HI
+49 (0)40/ 521 00 8800
ADHI@schuelke.com
(Schülke & Mayr UK Ltd.: +44-1142543500)

1.4 Emergency telephone number

Emergency telephone number : UK Poisons Emergency number: 0870 600 6266

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4	H302: Harmful if swallowed.
Skin corrosion, Category 1B	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Acute aquatic toxicity, Category 1	H400: Very toxic to aquatic life.
Chronic aquatic toxicity, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements	:	H302	Harmful if swallowed.
		H314	Causes severe skin burns and eye damage.
		H373	May cause damage to organs through prolonged or repeated exposure.
		H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	P273	Avoid release to the environment.
		P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
		P301+P310+P330	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.
		P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
		P305+P351+P338+P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
		P501	Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

7173-51-5 Didecyldimethylammonium chloride
Glycine, aminoalkyl derivs.

Special labelling of certain mixtures : Labelling according to Regulation (EC) No. 648/2004: (15 - 30 % non-ionic surfactants, perfumes)

Further information : The product is classified in accordance with Annex I (2.6.4.5) to Regulation (EC) 1272/2008.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
No special risks known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Solution of the following substances with harmless additives.

Hazardous components

Chemical name	Index-Number CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)

Didecyldimethylammonium chloride	612-131-00-6 7173-51-5 230-525-2	Acute Tox. 3; H301 Skin Corr. 1B; H314 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	15
Glycine, aminoalkyl derivs.	- - - - - - 941-419-7	Acute Tox. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318 STOT RE 1; H372 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	6,9
Tridecylpolyethylenglycolether	- - - 69011-36-5 Polymer	Acute Tox. 4; H302 Eye Dam. 1; H318	15 - 30
Propan-2-ol	603-117-00-0 67-63-0 200-661-7 01-2119457558-25-XXXX	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	3 - 8
N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine	- - - 2372-82-9 219-145-8 01-2119980592-29-XXXX	Acute Tox. 3; H301 Skin Corr. 1A; H314 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	< 5
Diethyleneglycol	603-140-00-6 111-46-6 203-872-2 01-2119457857-21-XXXX	Acute Tox. 4; H302 STOT REH373	< 5

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Take off all contaminated clothing immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes.

In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

If swallowed : Do NOT induce vomiting. Rinse mouth with water. Give small amounts of water to drink. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Treat symptomatically.,

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water, Dry powder, Foam, Carbon dioxide (CO2)

Unsuitable extinguishing media : No information available.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : No information available.

Specific risk from the substance or the product itself, its combustion products or evolved gases : Fire may cause evolution of:, Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx)

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Increased risk of slipping in the presence of leaked / spilled product.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4 Reference to other sections

see Section 8 + 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Prepare the working solution as given on the label(s) and/or the user instructions.

Advice on protection against fire and explosion : No special protective measures against fire required.

Hygiene measures : Keep away from food and drink.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage : Store at room temperature in the original container.

areas and containers

Further information on storage conditions : Keep container tightly closed. Keep away from direct sunlight.

Advice on common storage : No materials to be especially mentioned.

7.3 Specific end use(s)

Specific use(s) : none

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Propan-2-ol	67-63-0	Permissible exposure limit	200 ppm 500 mg/m3	TRGS 900
		Ceiling Limit Value	400 ppm 1.000 mg/m3	TRGS 900
		Permissible exposure limit	400 ppm 980 mg/m3	OSHA

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Propan-2-ol	Workers	Skin contact	Long-term exposure, Systemic effects	888 mg/kg
	Workers	Inhalation	Long-term exposure, Systemic effects	500 mg/m3
N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine	Workers	Inhalation	Long-term systemic effects	2,35 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,91 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Propan-2-ol	Fresh water	140,9 mg/l
	Marine water	140,9 mg/l
	Fresh water sediment	552 mg/kg
	Marine sediment	552 mg/kg
	Soil	28 mg/kg
N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine	Fresh water	0,001 mg/l
	Marine water	0,0001 mg/l
	Fresh water sediment	8,5 mg/kg

	Marine sediment	0,85 mg/kg
	Soil	45,34 mg/kg
	Sewage treatment plant	1,33 mg/l

8.2 Exposure controls

Engineering measures

Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection
Directive : The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Remarks : Splash protection: disposable nitrile rubber gloves e.g. Dermatril (layer thickness: 0.11 mm) made by KCL or gloves from other manufacturers offering the same protection. Prolonged contact: Butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0.70 mm) made by KCL or gloves from other manufacturers offering the same protection.

Protective measures : Avoid contact with skin and eyes.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	green
Odour	:	pleasant
Odour Threshold	:	not determined
pH	:	ca. 9,0, 20 °C, concentrate
Melting point/freezing point	:	< -5 °C
Decomposition temperature	:	Not applicable
Boiling point/boiling range	:	ca. 80 °C
Flash point	:	45 °C, DIN 51755 Part 1 Other information: Does not sustain combustion.
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Upper explosion limit	:	12 %(V), Raw material, literature value
Lower explosion limit	:	2 %(V), Raw material, literature value
Vapour pressure	:	ca. 34 hPa, 20 °C
Relative vapour density	:	No data available
Density	:	ca. 1,00 g/cm3, 20 °C
Solubility(ies)		
Water solubility	:	completely soluble , 20 °C
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	Propan-2-ol: 425 °C
Viscosity		
Viscosity, dynamic	:	not determined

Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Protect from frost, heat and sunlight.

10.5 Incompatible materials

Do not mix with other products.,

10.6 Hazardous decomposition products

None reasonably foreseeable.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity	:	Acute toxicity estimate: 760 mg/kg, Harmful if swallowed.
Acute inhalation toxicity	:	Acute toxicity estimate: 49,9 mg/l
Acute dermal toxicity	:	Acute toxicity estimate: > 5.000 mg/kg

Skin corrosion/irritation

Product:

Causes severe skin burns and eye damage., Calculation method

Serious eye damage/eye irritation

Product:

Causes serious eye damage., Calculation method

Respiratory or skin sensitisation

Components:

Didecyldimethylammonium chloride:
Did not cause sensitisation on laboratory animals.Buehler Test, Guinea pig
Glycine, aminoalkyl derivs.:
No data available
Tridecylpolyethylenglycolether:
Did not cause sensitisation on laboratory animals.Maximisation Test, Guinea pig
Propan-2-ol:

Did not cause sensitisation on laboratory animals.Buehler Test, Guinea pig
N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine:
Did not cause sensitisation on laboratory animals.Buehler Test, Guinea pig, OECD Test Guideline 406

Germ cell mutagenicity

Components:

Didecyldimethylammonium chloride:

Genotoxicity in vitro	:	OECD Test Guideline 471, Not mutagenic in Ames Test
Genotoxicity in vivo	:	Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis), Rat, Oral, OECD Test Guideline 475, negative
Germ cell mutagenicity- Assessment	:	Animal testing did not show any mutagenic effects.

Glycine, aminoalkyl derivs.:

Genotoxicity in vitro	:	No data available
Genotoxicity in vivo	:	No data available
Germ cell mutagenicity- Assessment	:	No data available

Tridecylpolyethylenglycolether:

Genotoxicity in vitro	:	Not mutagenic in Ames Test
Germ cell mutagenicity- Assessment	:	Not mutagenic in Ames Test

Propan-2-ol:

Germ cell mutagenicity- Assessment	:	Animal testing did not show any mutagenic effects.

N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine:

Genotoxicity in vitro	:	OECD Test Guideline 471, Not mutagenic in Ames Test
Germ cell mutagenicity- Assessment	:	Not mutagenic in Ames Test

Carcinogenicity

Components:

Didecyldimethylammonium chloride:

Carcinogenicity - Assessment	:	Animal testing did not show any carcinogenic effects.

Glycine, aminoalkyl derivs.:

Carcinogenicity - Assessment	:	No data available

Tridecylpolyethylenglycolether:

Carcinogenicity - Assessment	:	Based on available data, the classification criteria are not met.

Propan-2-ol:

Carcinogenicity - Assessment	:	Animal testing did not show any carcinogenic effects.

N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine:

Carcinogenicity - Assessment	:	Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Components:

Didecyldimethylammonium chloride:

Reproductive toxicity - Assessment	:	No data available

Glycine, aminoalkyl derivs.:

Reproductive toxicity - Assessment	:	No data available

Tridecylpolyethylenglycolether:

Effects on fertility	:	Two-generation study, Rat, NOAEL: > 250 mg/kg, F1: > 250 mg/kg, F2: > 250 mg/kg
Effects on foetal development	:	Rat, Oral, NOAEL: > 50 mg/kg, NOAEL: 50 mg/kg Rat, Dermal, NOAEL: > 250 mg/kg, NOAEL: 250 mg/kg
Reproductive toxicity - Assessment	:	Based on available data, the classification criteria are not met.

Propan-2-ol:

Reproductive toxicity - Assessment	:	Animal testing did not show any effects on fertility.

N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine:

Reproductive toxicity - Assessment	:	No toxicity to reproduction

STOT - single exposure

Components:

Didecyldimethylammonium chloride:
No data available
Tridecylpolyethylenglycolether:
The substance or mixture is not classified as specific target organ toxicant, single exposure.
Propan-2-ol:
May cause drowsiness or dizziness.
N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine:
No data available

STOT - repeated exposure

Product:

May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine:
Rat, NOAEL: 9 mg/kg, Oral, 90-days , OECD Test Guideline 408

Aspiration toxicity

No data available

Further information

Product:

No data is available on the product itself.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0,45 mg/l, 48 h, Analytical monitoring: yes, OECD Test Guideline 202, GLP: yes
Ecotoxicology Assessment Acute aquatic toxicity	:	Very toxic to aquatic life with long lasting effects.

Components:

Didecyldimethylammonium chloride:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 0,19 mg/l, 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0,062 mg/l, 48 h
Toxicity to algae	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): 0,026 mg/l, 96 h
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,032 mg/l , 34 d, Pimephales promelas (fathead minnow), OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,010 mg/l , 21 d, Daphnia magna (Water flea), OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	:	1

Glycine, aminoalkyl derivs.:

Toxicity to fish	:	LC50 (Cyprinus carpio (Carp)): 0,43 mg/l, 96 h, OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna): 0,11 mg/l, 48 h, OECD Test Guideline 202
Toxicity to algae	:	EbC50 (Desmodesmus subspicatus (green algae)): 0,03 mg/l, 72 h, OECD Test Guideline 201

Tridecylpolyethylenglycolether:

Toxicity to fish	:	LC50 (Cyprinus carpio (Carp)): 1 - 10 mg/l, 96 h, OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna): 1 - 10 mg/l, 48 h, OECD Test Guideline 202
Toxicity to algae	:	EC50 (Desmodesmus subspicatus (green algae)): 1 - 10 mg/l, 72 h, OECD Test Guideline 201

Propan-2-ol:

Toxicity to fish	:	LC50 (Leuciscus idus): > 100 mg/l, 48 h, static test, Raw material, literature value
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna): > 100 mg/l, 48 h, static test, Raw material, literature value
Toxicity to algae	:	EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l, 72 h, static test, Raw material, literature value

N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 0,45 mg/l, 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0,073 mg/l, 48 h
Toxicity to algae	:	ErC10 (Desmodesmus subspicatus (green algae)): 0,012 mg/l, 72 h, OECD Test Guideline 201 NOEC (Selenastrum capricornutum (green algae)): > 0,001 - 0,01 mg/l, 72 h, OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,024 mg/l , 21 d, Daphnia magna (Water flea), OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	:	1

12.2 Persistence and degradability

Product:

Biodegradability : Readily biodegradable, according to appropriate OECD test., OECD 301D / EEC 84/449 C6

Chemical Oxygen Demand (COD) : ca. 14.000 mg/l ,1 % solution

Components:

Didecyldimethylammonium chloride:

Biodegradability : Readily biodegradable., OECD 301B/ ISO 9439/ EEC 84/449 C5

Tridecylpolyethylenglycolether:

Biodegradability : Readily biodegradable., OECD 301B/ ISO 9439/ EEC 84/449 C5

Propan-2-ol:

Biodegradability : Readily biodegradable.

N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine:

Biodegradability : rapidly biodegradable, Biodegradation: 79 %, Exposure time: 28 d, OECD Test Guideline 301D

12.3 Bioaccumulative potential

Components:

Didecyldimethylammonium chloride:

Bioaccumulation : Lepomis macrochirus (Bluegill sunfish), 46 d, Bioconcentration factor (BCF): 81

Glycine, aminoalkyl derivs.:

Bioaccumulation : No data available

Tridecylpolyethylenglycolether:

Bioaccumulation : Bioaccumulation is unlikely.

Propan-2-ol:

Bioaccumulation : No bioaccumulation is to be expected (log Pow <= 4).

Partition coefficient: n-octanol/water : log Pow: 0,05 (20 °C), OECD Test Guideline 107

N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine:

Bioaccumulation : No data available

Partition coefficient: n-octanol/water : log Pow: -0,7

12.4 Mobility in soil

Components:

Didecyldimethylammonium chloride:

Mobility : Mobile in soils

Glycine, aminoalkyl derivs.:

Mobility : No data available

Tridecylpolyethylenglycolether:

Mobility : The product evaporates slowly., Adsorbs on soil.

Propan-2-ol:

Mobility : Mobile in soils

N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine:

Mobility : After release, adsorbs onto soil.

12.5 Results of PBT and vPvB assessment

Product:

Assessment	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Additional ecological information	:	none

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	:	Dispose of the product according to the defined EWC (European Waste Code) No.
Contaminated packaging	:	Take empty packaging to the recycling plant.
Waste key for the unused product	:	European waste catalog (EWC) 070601
Waste key for the unused product(Group)	:	Waste material of HZVA from fats, lubricants, soaps, detergents, disinfectants and personal protection products.

SECTION 14: Transport information

14.1 UN number

ADR	:	UN 1903
IMDG	:	UN 1903
IATA	:	UN 1903

14.2 UN proper shipping name

ADR	:	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Didecyldimethylammonium chloride, N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine)
IMDG	:	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Didecyldimethylammonium chloride, N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine)
IATA	:	Disinfectant, liquid, corrosive, n.o.s. (Didecyldimethylammonium chloride, N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine)

14.3 Transport hazard class(es)

ADR	:	8
IMDG	:	8
IATA	:	8

14.4 Packing group

ADR

Packing group	:	III
Classification Code	:	C9
Hazard Identification Number	:	80

Labels : 8
Tunnel restriction code : E

IMDG
Packing group : III
Labels : 8
EmS Code : F-A, S-B

IATA
Packing instruction (cargo aircraft) : 856
Packing group : III
Labels : Corrosive

14.5 Environmental hazards

ADR
Environmentally hazardous : yes

IMDG
Marine pollutant : yes

14.6 Special precautions for user

Not classified as supporting combustion according to the transport regulations.
For personal protection see section 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Legislation on the control of major-accident hazards involving dangerous substances : The product belongs to at least one of the categories 1 through 11 mentioned in Annex 1 of the Directive 1996/82/EC concerning the control of major accident hazards.

Volatile organic compounds : Volatile organic compounds (VOC) content: 6 %, Directive 2010/75/EC on the limitation of emissions of volatile organic compounds

Other regulations : The surfactant(s) contained in this mixture complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.Take note of Directive 2000/39/EC establishing

a first list of indicative occupational exposure limit values.

15.2 Chemical safety assessment

Exempt

SECTION 16: Other information

Full text of H-Statements

H225	:	Highly flammable liquid and vapour.
H301	:	Toxic if swallowed.
H302	:	Harmful if swallowed.
H314	:	Causes severe skin burns and eye damage.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H336	:	May cause drowsiness or dizziness.
H372	:	Causes damage to organs through prolonged or repeated exposure.
H373	:	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Acute aquatic toxicity
Aquatic Chronic	:	Chronic aquatic toxicity
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Flam. Liq.	:	Flammable liquids
Skin Corr.	:	Skin corrosion
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Develop-

ment; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification and procedure used to derive the classifikation for mixtures according to Regulation (EC) No. 1272/2008

Acute Tox. 4, H302	:	Calculation method
Skin Corr. 1B, H314	:	Calculation method
Eye Dam. 1, H318	:	Calculation method
STOT RE 2, H373	:	Calculation method
Aquatic Acute 1, H400	:	Calculation method
Aquatic Chronic 2, H411	:	Calculation method

Changes compared with the previous edition!!!

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