according to Regulation (EC) No. 1907/2006



gigazyme® No Change Service!

Version Revision Date: Date of last issue: 07.02.2018 05.06 26.03.2018 Date of first issue: 24.07.2001

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

1.1 Product identifier

Trade name : gigazyme®

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

Use of the Sub-

stance/Mixture

: Cleaning agent

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 : Application Department responsible for the +49 (0)40/ 521 00 8800

SDS/Contact person ApplicationDepartment.SM@schuelke.com

(Schülke & Mayr UK Ltd.: +44-1142543500)

1.4 Emergency telephone number

Emergency telephone num-

: UK Poisons Emergency number: 0870 600 6266

ber

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Eye irritation, Category 2 H319: Causes serious eye irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.

according to Regulation (EC) No. 1907/2006



gigazyme® No Change Service!

Version Revision Date: Date of last issue: 07.02.2018 05.06 26.03.2018 Date of first issue: 24.07.2001

Precautionary statements : P280 Wear eye protection/ face protection.

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

easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

Special labelling of certain

mixtures

: Labelling according to Regulation (EC) No. 648/2004: (5 - 15 %

non-ionic surfactants, enzymes, 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	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Alcohol, C13-C15 branched and linear, butoxylated ethoxy-	111905-53-4 Polymer 	Acute Tox. 4; H302 Eye Irrit. 2; H319 Aquatic Chronic 3; H412	5 - 15
Ethanol	64-17-5 200-578-6 603-002-00-5 01-2119457610-43- XXXX	Flam. Liq. 2; H225 Eye Irrit. 2; H319	5 - 15
Alkyl-polyethylenglycol- polybutylenglycolether	 Polymer 02-2119552546-34- XXXX	Skin Irrit. 2; H315 Aquatic Acute 1; H400 Aquatic Chronic 3; H412	< 5
Sodium cumenesulfonate	15763-76-5 239-854-6 01-2119489411-37- XXXX	Eye Irrit. 2; H319	< 5

For explanation of abbreviations see section 16.



according to Regulation (EC) No. 1907/2006



gigazyme® No Change Service!

Date of last issue: 07.02.2018 Version **Revision Date:** 05.06 26.03.2018 Date of first issue: 24.07.2001

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Take off contaminated clothing and shoes immediately.

If inhaled : If symptoms persist, call a physician.

In case of skin contact : Wash with water and soap as a precaution.

If symptoms persist, call a physician.

: In the case of contact with eyes, rinse immediately with plenty In case of eye contact

of water and seek medical advice.

If swallowed Do NOT induce vomiting.

> Drink water as a precaution. Consult a physician if necessary.

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 : Dry powder

> Carbon dioxide (CO2) Water spray jet

Foam

Unsuitable extinguishing

media

Do not use a solid water stream as it may scatter and spread

fire.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

: No information available.

5.3 Advice for firefighters

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

for firefighters



according to Regulation (EC) No. 1907/2006



gigazyme® No Change Service!

Version Revision Date: Date of last issue: 07.02.2018 05.06 26.03.2018 Date of first issue: 24.07.2001

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions : 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 : Use prepared working solution as soon as possible - Do not

store

Advice on protection against :

fire and explosion

No special protective measures against fire required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers

Further information on stor-

age conditions

Store at room temperature in the original container. Do not

store at temperatures above 30°C.

Keep away from heat. Keep away from direct sunlight. Keep

container tightly closed.

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
Ethanol	64-17-5	Permissible exposure limit	500 ppm 960 mg/m3	TRGS 900
		Ceiling Limit Val- ue	1.000 ppm 1.920 mg/m3	TRGS 900
		Permissible exposure limit	1.000 ppm 1.900 mg/m3	OSHA



according to Regulation (EC) No. 1907/2006



gigazyme® No

No Change Service!

Version Revision Date: Date of last issue: 07.02.2018 05.06 26.03.2018 Date of first issue: 24.07.2001

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Ethanol	Workers	Inhalation	Acute effects, Local effects	1900 mg/m3
	Workers	Skin contact	Chronic effects	343 mg/kg
	Workers	Inhalation	Chronic effects	950 mg/m3
Sodium cumenesul- fonate	Workers	Skin contact	Long-term systemic effects	136,25 mg/kg
	Workers	Skin contact	Long-term local ef- fects	0,096 mg/cm2
	Workers	Inhalation	Long-term systemic effects	26,9 mg/m3

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

Substance name	Environmental Compartment	Value
Ethanol	Fresh water	0,96 mg/l
	Marine water	0,79 mg/l
	Fresh water sediment	3,6 mg/kg
	Soil	0,63 mg/kg
Sodium cumenesulfonate	Fresh water	0,23 mg/l
	Marine water	0,023 mg/l
	Intermittent use/release	2,3 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water sediment	0,862 mg/kg
	Marine sediment	0,0862 mg/kg
	Soil	0,037 mg/kg

8.2 Exposure controls

Personal protective equipment

Eye protection : If splashes are likely to occur, wear:

Safety glasses with side-shields conforming to EN166

Hand protection

Directive : The selected protective gloves have to satisfy the specifica-

tions of EU Directive 89/686/EEC and the standard EN 374

derived from it.

Remarks : Prolonged contact: Nitrile rubber gloves e.g. Camatril (>480

Min., layer thickness: 0,40 mm) or 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. 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.

nom other mandracturers offering the same protection.

Respiratory protection : No personal respiratory protective equipment normally re-

quired.

Protective measures : Avoid contact with eyes.



according to Regulation (EC) No. 1907/2006



gigazyme®

No Change Service!

Version Revision Date: Date of last issue: 07.02.2018 05.06 26.03.2018 Date of first issue: 24.07.2001

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : blue

Odour : alcohol-like

Odour Threshold : not determined

pH : ca. 7 (20 °C)

Melting point/freezing point : < -5 °C

Decomposition temperature Not applicable

Boiling point/boiling range : ca. 90 °C

Flash point : 43 °C

Method: DIN 51755 Part 1

Other information: Does not sustain combustion.

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Vapour pressure : ca. 50 hPa (20 °C)

Vapour density : No data available

Relative density : ca. 1,00 g/cm3 (20 °C)

Solubility(ies)

Water solubility : > 100 g/l (20 °C)

Partition coefficient: n-

octanol/water

Not applicable

Auto-ignition temperature : Not applicable

Flow time : < 15 s at 20 °C

Method: DIN 53211

Explosive properties : No data available

Oxidizing properties : No data available

9.2 Other information

No data available

according to Regulation (EC) No. 1907/2006



gigazyme® No Change Service!

VersionRevision Date:Date of last issue: 07.02.201805.0626.03.2018Date of first issue: 24.07.2001

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

Hazardous reactions : None reasonably foreseeable.

10.4 Conditions to avoid

Conditions to avoid : Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Materials to avoid : Never mix concentrates directly.

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: > 10.000 mg/kg
Acute inhalation toxicity : Acute toxicity estimate: > 100 mg/l
Acute dermal toxicity : Acute toxicity estimate: > 15.000 mg/kg

Skin corrosion/irritation

Components:

Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:

Rabbit, OECD Test Guideline 404, Mild skin irritation

Ethanol:

Rabbit, No skin irritation

Alkyl-polyethylenglycol-polybutylenglycolether:

Rabbit, OECD Test Guideline 404, Causes skin irritation.

Sodium cumenesulfonate:

Rabbit, OECD Test Guideline 404, slight irritation, Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Product:

Causes serious eye irritation., Calculation method

Respiratory or skin sensitisation

Components:



according to Regulation (EC) No. 1907/2006



gigazyme® No Change Service!

Version Revision Date: Date of last issue: 07.02.2018 05.06 26.03.2018 Date of first issue: 24.07.2001

Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:

No data available

Ethanol:

Did not cause sensitisation on laboratory animals. Maximisation Test, Guinea pig

Alkyl-polyethylenglycol-polybutylenglycolether:

No data available

Sodium cumenesulfonate:

Did not cause sensitisation on laboratory animals. Buehler Test, Guinea pig, OECD Test Guide-

line 406

Germ cell mutagenicity

Components:

Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:

Germ cell mutagenicity- As- : No data available

sessment **Ethanol**:

Genotoxicity in vitro : OECD Test Guideline 471, Not mutagenic in Ames Test

Genotoxicity in vivo : Non mutagenic

Germ cell mutagenicity- As- : Tests on bacterial or mammalian cell cultures did not show

sessment mutagenic effects.

Alkyl-polyethylenglycol-polybutylenglycolether:Germ cell mutagenicity- As- : No data available

sessment

Sodium cumenesulfonate:

Genotoxicity in vitro : Mutagenicity (Salmonella typhimurium - reverse mutation as-

say), with and without metabolic activation, OECD Test Guide-

line 471, Not mutagenic in Ames Test

Genotoxicity in vivo : In vivo micronucleus test, Mouse, Oral, Non mutagenic

Germ cell mutagenicity- As-

sessment

Not mutagenic in Ames Test

Carcinogenicity

Components:

Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:

Carcinogenicity - Assess- : No data available

ment Ethanol:

Carcinogenicity - Assess- : Did not show carcinogenic effects in animal experiments.

ment

Alkyl-polyethylenglycol-polybutylenglycolether: Carcinogenicity - Assess- : No data available

ment

Sodium cumenesulfonate:

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

ment

Reproductive toxicity

Components:

Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:

Reproductive toxicity - As- : No data available

sessment **Ethanol**:

Effects on foetal develop: Rat, Oral, NOAEL: 2.000 mg/kg



according to Regulation (EC) No. 1907/2006



gigazyme® No Change Service!

Version Revision Date: Date of last issue: 07.02.2018 05.06 26.03.2018 Date of first issue: 24.07.2001

ment

Reproductive toxicity - As- : In animal testing, risk of impaired fertility was shown only after

sessment administration of very high doses of this substance.

Alkyl-polyethylenglycol-polybutylenglycolether: Reproductive toxicity - As- : No data available

sessment

Sodium cumenesulfonate:

Rat, Oral, NOAEL: 3.000 mg/kg, NOAEL: 3.000 mg/kg

Reproductive toxicity - As-

: study scientifically unjustified

sessment

STOT - single exposure

Components:

Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:

No data available

Ethanol:

No data available

Sodium cumenesulfonate:

The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Components:

Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:

Not classified due to data which are conclusive although insufficient for classification.

Ethanol:

No data available

Sodium cumenesulfonate:

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

Ethanol:

Rat, NOAEL: 1.730 mg/kg, LOAEL: 3.160 mg/kg, Oral90 d

Sodium cumenesulfonate:

Mouse, NOAEL: 440 mg/kg, LOAEL: 1.300 mg/kg, Dermal, OECD Test Guideline 411, Target

Organs: Skin, Subchronic toxicity

Aspiration toxicity

No data available

Further information

Product:

The product has not been tested.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:



according to Regulation (EC) No. 1907/2006



gigazyme® No Change Service!

Version Revision Date: Date of last issue: 07.02.2018 05.06 26.03.2018 Date of first issue: 24.07.2001

Toxicity to fish : LC50 (Leuciscus idus): 1 - 10 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna): > 1 - 10 mg/l

Exposure time: 48 h

Test Type: semi-static test

Toxicity to algae : Remarks: No data available

Ethanol:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 8.140 mg/l

Exposure time: 48 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 5.000 mg/l

Exposure time: 48 h

Toxicity to algae : IC50 (Scenedesmus quadricauda (Green algae)): > 100 mg/l

Exposure time: 72 h

Alkyl-polyethylenglycol-polybutylenglycolether:

Toxicity to fish : LC50 (Leuciscus idus): > 1 - 10 mg/l

Exposure time: 96 h Method: DIN 38412

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna): 0,1 - 1 mg/l

Exposure time: 48 h

Remarks: The toxicological data has been taken from prod-

ucts of similar composition.

Toxicity to algae : EC50 (Scenedesmus capricornutum (fresh water algae)): 0,4 -

1 mg/l

Exposure time: 96 h

Remarks: The toxicological data has been taken from prod-

ucts of similar composition.

NOEC (Scenedesmus capricornutum (fresh water algae)):

0,101 mg/l

Exposure time: 96 h

Remarks: The toxicological data has been taken from prod-

ucts of similar composition.

Toxicity to fish (Chronic tox-

icity)

Remarks: No data available

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

Remarks: No data available

Sodium cumenesulfonate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

according to Regulation (EC) No. 1907/2006



gigazyme® No Change Service!

Version Revision Date: Date of last issue: 07.02.2018 05.06 26.03.2018 Date of first issue: 24.07.2001

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Toxicity to algae EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h

12.2 Persistence and degradability

Product:

Biodegradability Result: Readily biodegradable.

Method: OECD 301D / EEC 84/449 C6

Components:

Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:

Biodegradability Result: Readily biodegradable.

Method: OECD Test Guideline 301F

Ethanol:

Biodegradability Result: Readily biodegradable.

Alkyl-polyethylenglycol-polybutylenglycolether:

Biodegradability Result: Readily biodegradable.

> Biodegradation: > 60 % Exposure time: 28 d

Method: OECD 301B/ ISO 9439/ EEC 84/449 C5

Sodium cumenesulfonate:

Biodegradability Result: Readily biodegradable.

12.3 Bioaccumulative potential

Components:

Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:

Bioaccumulation Remarks: Accumulation in aquatic organisms is unlikely.

Ethanol:

Bioaccumulation Remarks: Bioaccumulation is unlikely.

Partition coefficient: nlog Pow: -0,14

octanol/water Method: Calculated value

Alkyl-polyethylenglycol-polybutylenglycolether:

Bioaccumulation Remarks: Accumulation in aquatic organisms is unlikely.

Sodium cumenesulfonate:

Bioaccumulation Remarks: Bioaccumulation is unlikely.



according to Regulation (EC) No. 1907/2006



gigazyme® No Change Service!

Version Revision Date: Date of last issue: 07.02.2018 05.06 26.03.2018 Date of first issue: 24.07.2001

12.4 Mobility in soil

Components:

Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:

Mobility : Remarks: Substance does not evaporate from water surface

into the atmosphere., Adsorption to solid soil phase is possi-

ble.

Ethanol:

Mobility : Remarks: No data available

Alkyl-polyethylenglycol-polybutylenglycolether:

Mobility : Remarks: Substance does not evaporate from water surface

into the atmosphere., Adsorption to solid soil phase is possi-

ble.

Sodium cumenesulfonate:

Mobility : Remarks: Not expected to adsorb on 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 infor-

: No data is available on the product itself.

mation

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of the product according to the defined EWC (Euro-

pean Waste Code) No.

Contaminated packaging : Take empty packaging to the recycling plant.



according to Regulation (EC) No. 1907/2006



gigazyme® No Change Service!

Version Revision Date: Date of last issue: 07.02.2018 05.06 26.03.2018 Date of first issue: 24.07.2001

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

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

For personal protection see section 8.

14.7 Transport in bulk according to Annex II of Marpol 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

Not applicable

Concern for Authorisation (Article 59).

Regulation (EC) No 850/2004 on persistent organic pol-

Not applicable

lutants

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

Volatile organic compounds : Volatile organic compounds (VOC) content: 10 %

Remarks: 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.



according to Regulation (EC) No. 1907/2006



gigazyme® No Change Service!

Version Revision Date: Date of last issue: 07.02.2018 05.06 26.03.2018 Date of first issue: 24.07.2001

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.

H302 : Harmful if swallowed. H315 : Causes skin irritation.

H319 : Causes serious eye irritation. H400 : Very toxic to aquatic life.

H412 : Harmful 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 Irrit. : Eye irritation
Flam. Liq. : Flammable liquids
Skin Irrit. : Skin irritation

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 Development; 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



according to Regulation (EC) No. 1907/2006



gigazyme®

No Change Service!

VersionRevision Date:Date of last issue: 07.02.201805.0626.03.2018Date of first issue: 24.07.2001

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; SVHC - Substance of Very High Concern; 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 classification for mixtures according to Regulation (EC) No. 1272/2008

Eye Irrit. 2, H319 : Calculation method

Changes compared with the previous edition!!!

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

 Z_Z/EN

