

gigazyme®**No Change Service!**

Version 05.00

Revision Date 11.03.2015

Date of last issue 29.10.2012

Date of first issue 22.05.2007

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 againstUse of the Sub-
stance/Mixture : Cleaning agentRecommended restrictions
on use : Restricted to professional users.**1.3 Details of the supplier of the safety data sheet**Producer/Supplier : Schülke & Mayr GmbH
Robert-Koch-Str. 2
22851 Norderstedt
Germany
Telephone: +4940521000
Telefax: +494052100318
mail@schuelke.com
www.schuelke.comContact person : Application Department HI
+49 (0)40/ 521 00 544
ADHI@schuelke.com
(Schülke & Mayr UK Ltd.: +44-1142543500)**1.4 Emergency telephone number**Emergency telephone num-
ber : UK Poisons Emergency number: 0870 600 6266
Emergency telephone num-
ber : +49 (0)40 / 52 100 -0**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.

Classification (67/548/EEC, 1999/45/EC)

This mixture is not classified as dangerous according to Directive 1999/45/EC.

2.2 Label elements**|| Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

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Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.

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 mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).
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 (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
Alcohol, C13-C15 branched and linear, butoxylated ethoxy-	111905-53-4 Polymer	Xi; R36/38	Eye Irrit. 2; H319	5 - 15 %
Ethanol	603-002-00-5 64-17-5 200-578-6 01- 2119457610- 43-XXXX	F; R11	Flam. Liq. 2; H225 Eye Irrit. 2; H319	5 - 15 %
Alkyl-polyethylenglycol- polybutylenglycolether	Not Assigned Polymer	Xi; R38	Skin Irrit. 2; H315 Aquatic Chronic 2; H411	< 5 %
Sodium cumenesul- fonate	15763-76-5 239-854-6 01- 2119489411- 37-XXXX	Xi; R36	Eye Irrit. 2; H319	< 5 %

For explanation of abbreviations see section 16.

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

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|--------------------------------|------------------------------------------------------------------------|
| Suitable extinguishing media | : Dry powder, Carbon dioxide (CO ₂), Water spray jet, Foam |
| Unsuitable extinguishing media | : High volume water jet |

5.2 Special hazards arising from the substance or mixture

- | | |
|---------------------------------------|--------|
| Specific hazards during fire-fighting | : none |
|---------------------------------------|--------|

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 | : 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). |
|-------------------------|---------------------------------------------------------|

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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 : Store at room temperature in the original container. Do not store at temperatures above 30°C.

Further information on storage conditions : 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	WEL	1.000 ppm 1.920 mg/m ³	HSE

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

|| Ethanol : End Use: Workers, Exposure routes: Inhalation, Potential health effects: Acute effects, Local effects, Value: 1900 mg/m³
End Use: Workers, Exposure routes: Skin contact, Potential health effects: Chronic effects, Value: 343 mg/m³
End Use: Workers, Exposure routes: Inhalation, Potential health effects: Chronic effects, Value: 950 mg/m³

|| Sodium cumenesulfonate : End Use: Workers, Exposure routes: Skin contact, Potential health effects: Long-term systemic effects, Value: 7,6 mg/kg
End Use: Workers, Exposure routes: Inhalation, Potential health effects: Long-term systemic effects, Value: 53,6 mg/kg

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

|| Ethanol : Fresh water, Value: 0,96 mg/l
Marine water, Value: 0,79 mg/l
Fresh water sediment, Value: 3,6 mg/kg
Soil, Value: 0,63 mg/kg

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Sodium cumenesulfonate : Fresh water, Value: 0,23 mg/l
 Intermittent use/release, Value: 2,3 mg/l
 Sewage treatment plant, Value: 100 mg/l

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 : 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.

Respiratory protection : No personal respiratory protective equipment normally required.

Protective measures : Avoid contact with eyes.

Environmental exposure controls

General advice : Avoid subsoil penetration.

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
 Flash point : 43 °C, DIN 51755 Part 1
 Ignition temperature : Ethanol: > 360 °C
 Auto-ignition temperature : Not applicable
 Lower explosion limit : Ethanol: 3,1 %(V)
 Upper explosion limit : Ethanol: 15 %(V)
 Flammability : Does not sustain combustion.
 Explosive properties : Not explosive
 Oxidizing properties : Not applicable
 pH : 5,5 - 8, 20 °C, concentrate
 Melting point/freezing point : < -5 °C
 Decomposition temperature : No data available
 Boiling point/boiling range : ca. 90 °C,
 Thermal decomposition : No hazardous decomposition products are known.
 Vapour pressure : ca. 50 hPa, 20 °C,
 Relative vapour density : No data available
 Density : ca. 1,00 g/cm³, 20 °C
 Water solubility : > 100 g/l , 20 °C
 Partition coefficient: n-octanol/water : Not applicable
 Flow time : < 15 s at 20 °C, DIN 53211
 Evaporation rate : No data available

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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

None reasonably foreseeable.

10.4 Conditions to avoid

Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Do not mix with other products.

10.6 Hazardous decomposition products**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity****Product**

Acute oral toxicity	: Acute toxicity estimate: > 10000 mg/kg, Estimation of acute oral toxicity, in accordance with the calculation methode presented in the GHS (Globally Harmonized System), Part 3, Chapter 3.1)
Acute inhalation toxicity	: Acute toxicity estimate: > 100 mg/l, in accordance with the calculation methode presented in the GHS (Globally Harmonized System), Part 3, Chapter 3.1)
Acute dermal toxicity	: Acute toxicity estimate: > 15000 mg/kg, in accordance with the calculation methode presented in the GHS (Globally Harmonized System), Part 3, Chapter 3.1)

Skin corrosion/irritation**Components:****Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:**

Mild skin irritation, Rabbit, OECD Test Guideline 404

Ethanol:

No skin irritation, Rabbit

Alkyl-polyethylenglycol-polybutylenglycolether:

Rabbit, OECD Test Guideline 404

Sodium cumenesulfonate:

No skin irritation, Rabbit, OECD Test Guideline 404

Serious eye damage/eye irritation**Product**

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|| Causes serious eye irritation., Calculation method**Respiratory or skin sensitisation****Components:****Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:**

No data available

Ethanol:

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

Alkyl-polyethylenglycol-polybutylenglycolether:

No data available

Sodium cumenesulfonate:

Did not cause sensitisation on laboratory animals. Buehler Test, Guinea pig, OECD Test Guideline 406

Germ cell mutagenicity**Components:****Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:**

Germ cell mutagenicity- Assessment : No data available

Ethanol:

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

Genotoxicity in vivo : not mutagenic

Germ cell mutagenicity- Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Alkyl-polyethylenglycol-polybutylenglycolether:

Germ cell mutagenicity- Assessment : No data available

Sodium cumenesulfonate:

Genotoxicity in vitro : Not mutagenic in Ames Test Mutagenicity (Salmonella typhimurium - reverse mutation assay), with and without metabolic activation, OECD Test Guideline 471

Genotoxicity in vivo : not mutagenic, In vivo micronucleus test, Mouse, Oral

Germ cell mutagenicity- Assessment : Not mutagenic in Ames Test

Carcinogenicity**Components:****Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:**

Carcinogenicity - Assessment : No data available

Ethanol:

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

Alkyl-polyethylenglycol-polybutylenglycolether:

Carcinogenicity - Assessment : No data available

Sodium cumenesulfonate:

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

Reproductive toxicity**Components:****Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:**

Reproductive toxicity - Assessment : No data available

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essment

Teratogenicity - Assessment : No data available

Ethanol:

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

Reproductive toxicity - Assessment : In animal testing, risk of impaired fertility was shown only after administration of very high doses of this substance.

Teratogenicity - Assessment : Animal experiments showed mutagenic and teratogenic effects.

Alkyl-polyethylenglycol-polybutylenglycolether:

Reproductive toxicity - Assessment : No data available

Teratogenicity - Assessment : No data available

Sodium cumenesulfonate:

Effects on foetal development : Rat, Oral, NOAEL: 3.000 mg/kg, NOAEL: 3.000 mg/kg

Reproductive toxicity - Assessment : study scientifically unjustified

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

STOT - single exposure**Components:****Ethanol:**

No data available

STOT - repeated exposure

No data available

Repeated dose toxicity**Components:****Ethanol:**

Rat: NOAEL: 2.400 mg/kg, Oral

Sodium cumenesulfonate:

Mouse: NOAEL: 440 mg/kg, LOAEL: 1.300 mg/kg, Dermal, 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-:**

Toxicity to fish : LC50 (Leuciscus idus): 1 - 10 mg/l, 96 h

Toxicity to daphnia and other aquatic invertebrates : No data available

Toxicity to algae : No data available

Ethanol:

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Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 8.140 mg/l, 48 h
 Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 5.000 mg/l, 48 h
 Toxicity to algae : IC50 (Scenedesmus quadricauda (Green algae)): > 100 mg/l, 72 h

Alkyl-polyethylenglycol-polybutylenglycolether:

Toxicity to fish : LC50 (Leuciscus idus): 1 - 10 mg/l, 96 h
 Toxicity to daphnia and other aquatic invertebrates : No data available
 Toxicity to algae : No data available

Sodium cumenesulfonate:

Toxicity to fish : LC50: > 100 mg/l, 96 h, literature value
 Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l, 48 h
 Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l, 72 h

12.2 Persistence and degradability**Product**

Biodegradability : Readily biodegradable OECD 301D / EEC 84/449 C6

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

Biodegradability : Readily biodegradable OECD Test Guideline 301F

Ethanol:

Biodegradability : Readily biodegradable

Sodium cumenesulfonate:

Biodegradability : Readily biodegradable

12.3 Bioaccumulative potential**Product**

Partition coefficient: n-octanol/water : Not applicable

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

Bioaccumulation : No data available

Ethanol:

Bioaccumulation : Bioaccumulation is unlikely.
 Partition coefficient: n-octanol/water : log Pow: -0,14, calculated

Alkyl-polyethylenglycol-polybutylenglycolether:

Bioaccumulation : Accumulation in aquatic organisms is unlikely.

Sodium cumenesulfonate:

Bioaccumulation : Bioaccumulation is unlikely.

12.4 Mobility in soil**Components:****Alcohol, C13-C15 branched and linear, butoxylated ethoxy-:**

Mobility : No data available

Ethanol:

Mobility : No data available

Alkyl-polyethylenglycol-polybutylenglycolether:

Mobility : No data available

Sodium cumenesulfonate:

Mobility : Not expected to adsorb on soil.

12.5 Results of PBT and vPvB assessment

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according to Regulation (EC) No. 1907/2006

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Product

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

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

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

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

Legislation on the control of major-accident hazards in- : Directive 96/82/EC does not apply

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volving dangerous substances

Volatile organic compounds : 10 %, 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.

15.2 Chemical Safety Assessment

Exempt

SECTION 16: Other information

Full text of R-Phrases

R11 : Highly flammable.
R36 : Irritating to eyes.
R36/38 : Irritating to eyes and skin.
R38 : Irritating to skin.

Full text of H-Statements

H225 : Highly flammable liquid and vapour.
H315 : Causes skin irritation.
H319 : Causes serious eye irritation.
H411 : Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Chronic	Chronic aquatic toxicity
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquids
Skin Irrit.	Skin irritation

Further information

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.