

Trade name: RADIKALIN

Substance number: SUB302020510000 Version: 4 / EU Date revised: 02.02.2016

the date of issue: 09.04.07 Replaces Version: 3 / EU Print date: 02.02.16

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

### 1.1. Product identifier

RADIKALIN

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

# Use of the substance/preparation

Highly concentrated cleanser, especially developed for the high demands of industrial kitchens. For industrial application only.

# 1.3. Details of the supplier of the safety data sheet

#### Address/Manufacturer

HAGLEITNER HYGIENE International GmbH

Lunastrasse 5 A-5700 Zell am See

Telephone no. +43 (0)5 0456 Fax no. +43 (0)5 0456 7777

E-Mail regulatoryaffairs@hagleitner.at

Information provided Regulatory Affairs

by / telephone

E-mail address of regulatoryaffairs@hagleitner.at

person responsible for this SDS

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E-mail address of regulatoryaffairs@hagleitner.at

person responsible for this SDS

# 1.4. Emergency telephone number

Anti Poison Center Vienna: +43 (0)1 406 43430

# **SECTION 2: Hazards identification \*\*\***

# 2.1. Classification of the substance or mixture

# Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Skin Corr. 1C H314 Eye Dam. 1 H318

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008 For explanation of abbreviations see section 16.

### 2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms \*\*\*



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### Signal word \*\*\*

Danger

#### Hazard statements \*\*\*

H314 Causes severe skin burns and eye damage.

EUH208 Contains Methyl trimethyl-3-[(1-oxododecyl)amino]propylammonium sulphate, May

produce an allergic reaction.

# Precautionary statements \*\*\*

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor.

# Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains Isotridecanolethoxylate;2-Aminoethanol

For industrial application only.

#### 2.3. Other hazards

No special hazards have to be mentioned.

# SECTION 3: Composition/information on ingredients \*\*\*

### 3.2. Mixtures

# Hazardous ingredients (Regulation (EC) No. 1272/2008) \*\*\*

### 2-(2-Butoxyethoxy)ethanol

CAS No. 112-34-5 EINECS no. 203-961-6

Registration no. 01-2119475104-44-0005

Concentration >= 10 < 25 %

Classification (Regulation (EC) No. 1272/2008)

Eye Irrit. 2 H319

#### 2-Butoxvethanol

CAS No. 111-76-2 EINECS no. 203-905-0

Registration no. 01-2119475108-36-XXXX

Concentration >= 1 < 7,5 %

Classification (Regulation (EC) No. 1272/2008)

 Skin Irrit. 2
 H315

 Acute Tox. 4
 H332

 Acute Tox. 4
 H312

 Acute Tox. 4
 H302

 Eye Irrit. 2
 H319

# 2-Aminoethanol



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CAS No. 141-43-5 EINECS no. 205-483-3

Concentration >= 3 < 5 %

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4 H312 Acute Tox. 4 H302 Skin Corr. 1B H314 Acute Tox. 4 H332

Concentration limits (Regulation (EC) No. 1272/2008)

Isotridecanolethoxylate

CAS No. POLYMER

EINECS no. N.A.

Registration no. 02-2119552461-55-0000

Concentration >= 1 < 2,3 %

Classification (Regulation (EC) No. 1272/2008)

Eye Dam. 1 H318 Acute Tox. 4 H302

Concentration limits (Regulation (EC) No. 1272/2008)

Eye Dam. 1 H318 >= 10 %

H319 < 10 %

Trisodium nitrilotriacetate

CAS No. 5064-31-3 EINECS no. 225-768-6

Concentration >= 0,1 < 1 %

Classification (Regulation (EC) No. 1272/2008)

Eye Irrit. 2 H319
Carc. 2 H351
Acute Tox. 4 H302

Concentration limits (Regulation (EC) No. 1272/2008)

Carc. 2 H351 >= 5

Methyl trimethyl-3-[(1-oxododecyl)amino]propylammonium sulphate

CAS No. 10595-49-0 EINECS no. 234-204-8

Concentration >= 0,1 < 1 %

Classification (Regulation (EC) No. 1272/2008)

Skin Irrit. 2 H315 Eye Dam. 1 H318 Skin Sens. 1 H317 Aquatic Acute 1 H400 Aquatic Chronic 2 H411

Ingredients (Regulation (EC) No 648/2004)

less than 5 %: NTA (nitrilotriacetic acid) and salts thereof non-ionic surfactants

cationic surfactants

phosphates



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further ingredients: optical brighteners

allergenic fragrances (>0,01% by weight):

CITRAL

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

#### **General information**

Remove contaminated, soaked clothing immediately and dispose of safely.

### After inhalation

Ensure supply of fresh air. No special measures required.

#### After skin contact

In case of contact with skin wash off with warm water. No special measures required.

# After eye contact

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Eye treatment by an Occulist.

### After ingestion

Rinse mouth thoroughly with water. If swallowed, seek medical advice immediately and show this container or label.

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

Until now no symptoms known so far.

# 4.3. Indication of any immediate medical attention and special treatment needed Hints for the physician / treatment

Treat symptomatically

# **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

### Suitable extinguishing media

Compatible with all usual extinguishing media.

# Non suitable extinguishing media

Full water jet

# 5.2. Special hazards arising from the substance or mixture

None known

# 5.3. Advice for firefighters

### Special protective equipment for fire-fighting

In case of combustion use a suitable breathing apparatus.

### Other information

Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations.

# **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

High risk of slipping due to leakage/spillage of product. Use personal protective clothing.

# 6.2. Environmental precautions



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Do not discharge into the subsoil/soil. Do not discharge into surface waters/groundwater.

# 6.3. Methods and material for containment and cleaning up

Take up with absorbent material (eg sand, kieselguhr, universal binder). Rinse away rest with plenty of water.

# 6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

# SECTION 7: Handling and storage

# 7.1. Precautions for safe handling

# Advice on safe handling

Keep container tightly closed. Observe the usual precautions for handling chemicals. Provide good ventilation of working area (local exhaust ventilation if necessary).

# Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

# 7.2. Conditions for safe storage, including any incompatibilities

# Recommended storage temperature

Value >= 5 <= 25 °C

### Storage stability

Storage life: 3 years

# Requirements for storage rooms and vessels

Keep only in the original container. Storage rooms must be properly ventilated.

### Further information on storage conditions

Keep locked up and out of the reach of children. Keep container tightly closed; open and handle with care.

### 7.3. Specific end use(s)

For industrial application only.

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

### Other information

Maintain air concentrations below occupational exposure standards.

### 8.2. Exposure controls

### General protective and hygiene measures

Avoid prolonged and/or repeated contact with skin. Use barrier skin cream. Do not eat, drink or smoke during work time. Observe the usual precautions for handling chemicals.

# Respiratory protection

Not necessary, but do not inhale vapours.

#### Hand protection

In case of intensive contact wear protective gloves.

Appropriate Material butyl

Material thickness = 0,5 mm Breakthrough time >= 120 min

Appropriate Material nitrile

z.B.: BRILLANT nitrilX-TREME, Art.-Nr. 4451001000 oder BRILLANT nitrilSTYLE, Art.-Nr. 4451001300

# Eye protection



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Safety glasses

**Body protection** 

Clothing as usual in the chemical industry.

**SECTION 9: Physical and chemical properties** 

9.1. Information on basic physical and chemical properties

Form liquid, clear Colour green

Odour Product specific

pH value

Value appr. 12,5 Concentration/H2O 100 % Temperature 20 °C

Freezing point

Value appr. -4 to 4 °C

**Sublimation point** 

Remarks not determined

Initial boiling point and boiling range

Value appr. 100 °C

Flash point

Value > 100 °C

**Evaporation rate** 

Remarks not determined

**Evaporation rate (ether = 1):** 

Remarks not determined

Flammability (solid, gas)

Not ignitable

Vapour pressure

Remarks not determined

Vapour density

Remarks not determined

**Density** 

Value 1,024 g/cm<sup>3</sup>

Temperature 20 °C

Solubility in water

Remarks Completely miscible

Solubility(ies)

Remarks not determined

Partition coefficient: n-octanol/water

Remarks not determined

**Auto-ignition temperature** 

Remarks not determined

**Combustion factor** 

Remarks not determined

**Decomposition temperature** 

Remarks No decomposition if used as prescribed.



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**Viscosity** 

dynamic

Value < 20 mPa.s

Temperature 20 °C

**Oxidising properties** 

evaluation None known

9.2. Other information

**Bulk density** 

Remarks not determined

Packed bulk density

Remarks not determined

**Solids content** 

Remarks not determined

**Saturation Concentration** 

Remarks not determined

**Critical point** 

Remarks not determined

**Dissociation constant** 

Remarks not determined

**Surface tension** 

Remarks not determined

Other information

None known

# **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

Reactions with impurities.

### 10.2. Chemical stability

Protect from extreme heat and cold.

# 10.3. Possibility of hazardous reactions

No hazardous reactions known.

# 10.4. Conditions to avoid

Keep at temperature not exceeding 30 °C.

### **Decomposition temperature**

Remarks No decomposition if used as prescribed.

# 10.5. Incompatible materials

No hazardous reactions when stored and handled according to prescribed instructions.

# 10.6. Hazardous decomposition products

No hazardous decomposition products known.

# SECTION 11: Toxicological information

# 11.1. Information on toxicological effects

Acute oral toxicity



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ATE 8.152,78 mg/kg

98

Method calculated value (Regulation (EC) No. 1272/2008)

**Acute oral toxicity (Components)** 

2-(2-Butoxyethoxy)ethanol

Species rat

LD50 > 2000 mg/kg

Source Literature value

2-Butoxyethanol

Species rat

LD50 = 470 mg/kg

**Acute dermal toxicity** 

ATE 5.927,43 mg/kg

23

Method calculated value (Regulation (EC) No. 1272/2008)

**Acute dermal toxicity (Components)** 

2-(2-Butoxyethoxy)ethanol

Species rabbit

LD50 > 2000 mg/kg

Source Literature value

2-Butoxyethanol

Species rabbit

LD50 = 220 mg/kg

Acute inhalational toxicity

ATE > 100 mg/l

Administration/Form Vapors

Method calculated value (Regulation (EC) No. 1272/2008)
ATE > 20 mg/l

Administration/Form Dust/Mist

Method calculated value (Regulation (EC) No. 1272/2008)

**Acute inhalative toxicity (Components)** 

2-Butoxyethanol

Species rat

LC50 = 2,17 mg/l

Duration of exposure = 4 h

Skin corrosion/irritation

evaluation irritant

Serious eye damage/irritation

evaluation irritant - risk of serious damage to eyes

Sensitization

evaluation non-sensitizing **Subacute**, **subchronic**, **chronic toxicity** 

Remarks not determined

Mutagenicity

Remarks not determined

Reproductive toxicity

Remarks not determined

Carcinogenicity

Remarks not determined



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### **Specific Target Organ Toxicity (STOT)**

Remarks not determined

### **Experience in practice**

Inhalation may lead to irritation of the respiratory tract.

# Other information

Product specific toxicological data are not known.

# **SECTION 12: Ecological information**

# 12.1. Toxicity

# Fish toxicity (Components)

# 2-(2-Butoxyethoxy)ethanol

Species golden orfe (Leuciscus idus)

LC50 > 100 mg/l

Source Literature value

2-Butoxyethanol

= 1250 to 1490 mg/l

Duration of exposure = 96 h

### **Daphnia toxicity (Components)**

### 2-(2-Butoxyethoxy)ethanol

Species Daphnia magna

EC50 > 100 mg/l

Duration of exposure = 48 h

Source Literature value

2-Butoxyethanol

LC50 = 800 mg/l

Duration of exposure = 48 h

# Algae toxicity (Components)

2-(2-Butoxyethoxy)ethanol

EC50 > 100 mg/l

Source Literature value

### 12.2. Persistence and degradability

#### **General information**

not determined

# 12.3. Bioaccumulative potential

# **General information**

not determined

# Partition coefficient: n-octanol/water

Remarks not determined

# 12.4. Mobility in soil

#### **General information**

not determined

### 12.5. Results of PBT and vPvB assessment

### **General information**

not determined

#### 12.6. Other adverse effects



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#### **General information**

not determined

### General information / ecology

The surfactant(s) contained in this preparation 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.

# **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

### Disposal recommendations for the product

EWC waste code 20 01 29\* detergents containing dangerous substances
The listed waste code numbers, according to the European Waste Catalogue (EWC), are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.

# Disposal recommendations for packaging

Completely emptied packagings can be given for recycling.

# **SECTION 14: Transport information**

# Land transport ADR/RID

Non-dangerous goods

14.1. UN number

UN -

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Class

14.4. Packing group

Packing group

14.5. Environmental hazards

-

# Marine transport IMDG/GGVSee

The product does not constitute a hazardous substance in sea transport.

14.1. UN number

UN -

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Class

14.4. Packing group

Packing group

14.5. Environmental hazards

-

### Air transport ICAO/IATA

The product does not constitute a hazardous substance in air transport.

14.1. UN number

UN -

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

Class



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### 14.4. Packing group

Packing group

14.5. Environmental hazards

-

# Information for all modes of transport

14.6. Special precautions for user

Non-dangerous goods

## Other information

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not determined

# **SECTION 15: Regulatory information**

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

#### less than 5 %:

non-ionic surfactants, NTA (nitrilotriacetic acid) and salts thereof, phosphates, cationic surfactants, polycarboxylates

### **Further ingredients**

A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1), Terpineols, p-tert-Butyl-alpha-methylhydrocinnamic aldehyde, Citronellal, dl-Citronellol, Dipentene, Benzyl alcohol, Citral

### VOC

H302

L1242

VOC (CH) = 8,03 % VOC (EU) = 8,03 %

#### 15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

Harmful if swallowed.

Harmful in contact with alsin

# **SECTION 16: Other information**

Alterations/supplements: Alterations to the previous edition are marked with an asterisk (\*) in the left-hand margin.

# Hazard statements listed in Chapter 3

പാ12	Haimiui in contact with Skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

# **CLP categories listed in Chapter 3**

Acute Tox. 4 Acute toxicity, Category 4

Aquatic Acute 1 Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 2 Hazardous to the aquatic environment, chronic, Category 2

Carc. 2 Carcinogenicity, Category 2
Eye Dam. 1 Serious eye damage, Category 1

Eye Irrit. 2 Eye irritation, Category 2



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Skin Corr. 1B Skin corrosion, Category 1B
Skin Irrit. 2 Skin irritation, Category 2
Skin Sens. 1 Skin sensitization, Category 1

#### **Abbreviations**

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route

IMDG: International Maritime Code for Dangerous Goods

IATA: International Civil Aviation Organization

CAS: Chemical Abstracts Service

EINECS: European Inventory of Existing Commercial Chemical Substances

VOC: Volatile Organic Compound NOEL: No observable effect level

NOEC: No observable effect concentration

LD: Lethal dose

LC: Lethal concentration

REACH: Registration, Evaluation, Autohorisation and Restriction of Chemicals

IMO: International Maritime Organization

DNEL: Derived no effect level

PNEC: Predicted no effect concentration

RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses

EC: European Community EU: European Union

GHS: Globally Harmonized System of classification and Labelling of Chemicals

MAK: Maximale Arbeitsplatz-Konzentration

INCI: International Nomenclature of Cosmetic Ingredients

**UN: United Nations** 

### **Supplemental information**

Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\* This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.