

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

1.1 Product identifierTrade name: **RASCOflex GT221 A-Comp**

CAS Number:

1344-09-8

EC number:

215-687-4

Registration number 01-2119448725-31-0004

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

This product is only for industrial and professional uses.

Application of the substance / the mixture

raw material / auxiliary agent for chemical refinement and technical applications in the industry

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:****Rascor International AG**

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Schweiz

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Further information obtainable from:

E-Mail: info@rascor.com / Phone: +41 (0)44 857 11 11

1.4 Emergency telephone number:

Telefon (CH) +41 44 251 51 51, Telefon (DE) +49 (0)551 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The substance is not classified according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

2.3 Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances

CAS No. Description:

1344-09-8 Silicic acid, sodium salt, mol ratio > 3,2

Identification number(s):

EC number: 215-687-4

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components: Void

Additional information

For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures**General information** No special measures required.**After skin contact** Immediately rinse with water.**After eye contact** Rinse opened eye 15 minutes under running water.**After swallowing**

Rinse out mouth and then drink plenty of water.

Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents

Product itself is not combustible; define extinguishing measures according to neighbouring conditions.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Particular danger of slipping on leaked/spilled product.

6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

Handling

Precautions for safe handling Avoid contact with eyes, skin and clothing.

7.1 Information about fire - and explosion protection:

No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles:

Do not use light alloy receptacles.

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: glass or ceramic.

Unsuitable material for receptacle: zinc.

Suitable material for receptacles and pipes: steel or stainless steel.

Information about storage in one common storage facility:

Do not store together with acids.

Further information about storage conditions:

Protect from frost.

storage stability: 12 month

Storage class 12 (TRGS 510)

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities:

No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

Not required.

DNELs

Silicic acid, sodium salt:

DNEL dermal - workers, long-term = 1,59 mg/kg bw/d

DNEL inhalation - workers, long-term = 5,61 mg/m³ bw/d

DNEL dermal - general population, long-term = 0,80 mg/kg bw/d

DNEL inhalation - general population, long-term = 1,38 mg/m³ bw/d

DNEL oral - general population, long-term = 0,80 mg/kg bw/d

PNECs

Silicic acid, sodium salt:

PNEC aqua - freshwater = 7,5 mg/l

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Additional information: Exposure scenario: see Annex**8.2 Exposure controls****Personal protective equipment****General protective and hygienic measures**

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not required.**Protection of hands:** Alkaline resistant gloves**Material of gloves**

Natural Latex with small amount of polychloroprene Latex. (Lapren, Company KCL)

Penetration time of glove materialValue for the permeation: Level \leq 6

Indications are based on information by the producer of the gloves resp. literature or derived from similar substances by analogy.

Eye protection: Safety glasses**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance:**

Form:	Fluid
Colour:	Colourless
Odour:	Odourless

pH-value (100 g/l) at 20 °C: ca. 11.3**Change in condition****Boiling point/Boiling range:** > 100 °C**Flash point:** Not applicable**Self-igniting:** Product is not selfigniting.**Danger of explosion:** Product does not present an explosion hazard.**Density at 20 °C:** ca. 1.26 g/cm³**Solubility in / Miscibility with****Water:** Fully miscible**Viscosity:****dynamic at 20 °C:** ca. 50 mPas**Organic solvents:** 0.0 %**9.2 Other information** No further relevant information available.**SECTION 10: Stability and reactivity****10.1 Reactivity** No further relevant information available.**10.2 Chemical stability****Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

Strong exothermic reaction with acids

Reacts with light alloys to form hydrogen

10.4 Conditions to avoid No further relevant information available.**10.5 Incompatible materials:** No further relevant information available.**10.6 Hazardous decomposition products:** No dangerous decomposition products known**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity****LD/LC50 values relevant for classification:****1344-09-8 Silicic acid, sodium salt, mol ratio > 3,2**

Oral | LD 50 | > 2000 mg/kg (rat)

Primary irritant effect:

Skin corrosion/irritation slightly irritant

Serious eye damage/irritation slightly irritant

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Safety data sheet

according to 1907/2006/EC, Article 31

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Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.**Reproductive toxicity**

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:****1344-09-8 Silicic acid, sodium salt, mol ratio > 3,2**

EC 50 / 48h > 1000 mg/l (Daphnie)

LC 50 / 96h > 1000 mg/l (Brachydanio rerio)

12.2 Persistence and degradability No further relevant information available.**Other information:**

Readily eliminable from water.

Inorganic product; biotic degradation not applicable.

12.3 Bioaccumulative potential No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**Ecotoxicological effects:****Remark:** No toxicity after neutralization.**Behaviour in sewage processing plants:**

The product is an alkaline solution. Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.

Additional ecological information:**General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects** No further relevant information available.**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation**

Can be disposed off with rubble after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

European waste catalogue

Waste catalogue numbers are to be defined according to the AVV-Regulation, specially for application sectors.

Uncleaned packaging:**Recommendation:** Disposal must be made according to official regulations.**Recommended cleansing agents:** Water, if necessary together with cleansing agents.**SECTION 14: Transport information****14.1 UN-Number**

ADR, ADN, IMDG, IATA Void

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA Void

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14.3 Transport hazard class(es)ADR, ADN, IMDG, IATA
Class

Void

14.4 Packing group

ADR, IMDG, IATA

Void

14.5 Environmental hazards:

Marine pollutant:

No

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to

Annex II of Marpol and the IBC Code

Not applicable.

UN "Model Regulation":

Void

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Water hazard class:** water hazard class 1: slightly hazardous for water**Other regulations, limitations and prohibitive regulations**

Chemical Inventories:

Europe (EINECS): yes

Australia (AICS): yes

Canada (DSL): yes

US (TSCA): yes

Japan (ENCS): yes

Korea (KECI): yes

China (IECSC): yes

Taiwan (NECI): yes

Philippine (PICCS): yes

New Zealand (HSNO): yes

15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.**SECTION 16: Other information**

The product is designed exclusively for professional/industrial application (see product information). This information is based on our level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Department issuing MSDS: Laboratory**Contact:** Mrs. Dr. Kissel**Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

*** Data compared to the previous version altered.**

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Annex: Exposure scenario 1**Short title of the exposure scenario**

Workplace exposure to silicic acid, sodium salt (EC 215-687-4) solutions

Sector of Use

Sectors of use [SU]: 3, 22 (including the supplementary SU: 2a, 2b, 4, 5, 6b, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20)

Process category

Process category [PROC]: 1, 2, 3, 4, 5, 6, 7, 8a, 8b, 9, 10, 11, 13, 14, 15, 16, 17, 19, 21, 22, 23, 24, 25, 26

Environmental release category

Environmental release categories [ERC]: 1, 2, 3, 4, 5, 6a, 6b, 6d, 7, 8a, 8b, 8c, 8d, 8e, 8f, 9a, 9b

Description of the activities / processes covered in the Exposure Scenario

Manufacture and formulation of the substance as well as industrial and professional uses.

Conditions of use**Duration and frequency** Covers frequency up to: daily use, weekly, monthly, yearly.**Physical parameters****Physical state** Liquid, Solution, Vapour pressure 0.31 Pa (1165 °C)**Concentration of the substance in the mixture**

Covers percentage substance in the product up to 100 %, unless otherwise stated.

Used amount per time or activity No limit.**Other operational conditions****Other operational conditions affecting environmental exposure**

No special measures required.

Other operational conditions affecting consumer exposure Not required.**Other operational conditions affecting consumer exposure during the use of the product**

Not applicable.

Risk management measures

If possible, local exhaust ventilation should be used. In addition, whenever sodium silicate as a substance on its own or in a preparation is handled outside closed systems, suitable personal protective equipment (gloves, goggles, dust masks or respirators) is the preferred and only measure of control.

Worker protection

Assumes a good basic standard of occupational hygiene is implemented.

The work occurs inside as well as outside.

Organisational protective measures

PROC 1, 2, 3 Use in closed systems. No other specific measures identified.

Technical protective measures

PROC 7, 11 Provide enhanced general ventilation by mechanical means.

An approved dust mask should be worn if dust is generated during handling. Wear: Half-face mask (DIN EN 140)/Quarter-face mask (DIN EN 140); Filter type: A/P2 or better. Wear protective gloves/eye protection.

Gloves: Wear impervious gloves (EN 374).

Personal protective measures

PROC 4, 5, 6, 8a, 8b, 9, 10, 13, 14, 15, 17, 19, 21, 22, 23, 24, 25, 26 Wear protective gloves/eye protection.

Gloves: Wear impervious gloves (EN 374).

Measures for consumer protection No special measures required.**Environmental protection measures**

Not required, as soluble silicates including silicic acid, sodium salt do not meet the criteria for classification as dangerous to the environment according to 67/548/EEC (See Article 14.4 of REACH Regulation).

Furthermore, as high production volume substances, soluble silicates have been reviewed to a great extent for their exposure potential to the environment and the possible risks arising from their release (Van Dokkum et al. 2002, OECD SIDS 2004, HERA 2005, and CEES 2008). It was concluded that soluble silicates are currently of low priority for further work because of their low hazard profile.

Air No special measures required.**Water** No special measures required.**Disposal measures** Ensure that waste is collected and contained.**Disposal procedures** Hand over to hazardous waste disposers.**Waste type** Partially emptied and uncleaned packaging**Exposure estimation**

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When the recommended risk management measures (RMM) and operational conditions (OC) including personal protective equipment (PPE) are used, the exposure to aqueous solutions of silicic acid, sodium salt will be negligible.
RMMs are based on a qualitative risk characterization.

Consumer Not relevant for this Exposure Scenario.

Guidance for downstream users

The implemented RMMs and OCs including PPE will ensure that workers' exposure is reduced in a way that health hazard effects are avoided and that the risk is considered to be adequately controlled.

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Annex: Exposure scenario 2**Short title of the exposure scenario** Use in Consumer products**Sector of Use**

Sectors of use [SU]: 21 (including the supplementary SU: 2a, 6b, 10, 13, 18, 19)

Product category

Product category [PC]: 1, 3, 8, 9a, 9b, 14, 15, 26, 31, 35, 37, 39

Process category

Process category [PROC]: 1, 3, 8, 9a, 9b, 14, 15, 26, 31, 35, 37, 39

Environmental release category

Environmental release categories [ERC]: 8a, 8b, 8c, 8d, 8e, 8f, 9a, 9b

Description of the activities / processes covered in the Exposure Scenario

General exposures to consumers arising from the use of household products sold.

Conditions of use**Duration and frequency** Covers frequency up to: daily use, weekly, monthly, yearly.**Physical parameters****Physical state** Powder/ Liquid, Vapour pressure 0.31 Pa (1165 °C)**Concentration of the substance in the mixture**

Covers percentage substance in the product up to 100 %, unless otherwise stated.

Used amount per time or activity No limit.**Other operational conditions****Other operational conditions affecting environmental exposure**

No special measures required.

Other operational conditions affecting consumer exposure Not required.**Other operational conditions affecting consumer exposure during the use of the product**

Not applicable.

Risk management measuresUnless otherwise stated assumes use at ambient temperatures; assumes use in a 20m³ (ECHA guidance R.15., 2008) room; assumes use with typical ventilation.**Worker protection****Technical protective measures**

Covers use up to 365 days/year; covers use under typical household ventilation.

Personal protective measures No special measures required.**Measures for consumer protection**

In consumer products the irritation hazard of soluble silicates is addressed, if necessary, by appropriate labelling and the advice to use (household) gloves on the consumer product. In general, dermal, inhalation and oral consumer exposure to commercially available products minimised due to formulation (limited concentration of soluble silicates, particle size distribution, agglomeration and dust potential, tablets and gels), packaging and bad taste of commercially available products.

Disposal measures Ensure that waste is collected and contained.**Disposal procedures** Dispose of product residues with household waste.**Waste type** Partially emptied and uncleaned packaging**Exposure estimation**

Some product uses could result in local irritation (skin and eyes) if highly concentrated products, which is usually not the case, are used. This hazard is addressed, if necessary, by appropriate labelling and the advice to use household gloves on the consumer product. In general, dermal, inhalation and oral consumer exposure to commercially available products is minimised by formulation measures (use of limited concentrations, reduction of dust potential by agglomeration or use of tablets and gels), bad taste of the products, packaging devices (sealing of tablets, child-resistant fastenings) or denaturing.

Consumer

Besides the product integrated RMMs, consumer instructions and the communication on the safe use should be implemented, including technical use instructions, instructions on use of protective clothing and behaviour, storage and disposal instructions. The implemented risk mitigation measures will ensure that consumer's exposure is reduced in a way that health hazard effects are avoided and that the risk is considered to be adequately controlled.

Guidance for downstream users No further relevant information available.