

SAFETY DATA SHEET AQUACARE ALUMINIUM OXIDE (ALL GRADES)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name I/PDR 8025F (29 µm) Aluminium Oxide
I/PDR 8024F (53 µm) Aluminium Oxide

Synonyms Alumina

1.2 Uses of the product

Identified Uses Dental abrasive for professional use. Class IIa medical device under directive 93/42 EEC.

Uses Advised Against None known

1.3 Details of the supplier of the safety data sheet

Supplier Medivance Instruments Ltd.
Barretts Green Road
Harlesden
London
NW10 7AP
T +44 (0) 20 8965 2913
F +44 (0) 20 8963 1270
enquiries@velopex.com

1.4 Emergency telephone number

020 8965 2913

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification

Class IIa Medical Device Under Directive 93/42 EEC

2.2 Label elements

Does not require labelling under the CLP regulation (EC) No. 1272/2008. But please take note of this product information.
No risk of silicosis during application

Safety Instructions

Possible dust exposure due to fine dust particles.

2.3 Other hazards

Not Known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	NK (Mean values)	NK Micro (Mean values)	EK (Mean values)	EK Micro (Mean values)	EKR (Mean values)
Aluminium (Al_2O_3)	95.65%	95.77%	99.73%	99.69%	99.30%
Titanium dioxide (TiO_2)	2.42%	2.79%	-/-	-/-	-/-

Chemical Characterisation	EINECS	CAS No.	(1) REACH Registration No. (2) CLP Notification No.	Classification according to CLP Regulation EC No. 1272 / 2008	
				Hazard Classes / Hazard Categories	Hazard Statements
Aluminium (Al_2O_3)	215-691-6	1344-28-1	(1) 01-2119529248-35-0010 (2) 02-2119709295-38-0000	-/-	-/-
Titanium dioxide (TiO_2)	236-675-5	13463-67-7	(2) 02-2119879066-28-0000	-/-	-/-

Substances listed on the aforesaid 'Candidate list of Substances of Very High Concern (SVHC) for authorisation of the European Chemicals Agency (ECHA) are not intentional ingredients of this product. It is therefore not to be expected that those substances are present in quantities of > 0.1% in the product

Hazardous Substances

No dangerous ingredients

Substances with prescribed EC exposure limits

Does not contain substances with EC exposure limits

SECTION 4: FIRST AID MEASURES

Please also take note of sections 8 and 16 of this product information.

4.1 Description of first aid measures

General Information

Consult a doctor in case of health disorders.

After Inhalation

Provide the affected person with fresh air. Consult a doctor in case of irritation of the respiratory tract.

After eye contact

Remove contact lenses and rinse the eyes with open eyelids for 10 minutes under running water. If necessary, consult an ophthalmologist.

After skin contact

Wash with water and rinse.

After swallowing

Rinse mouth and drink plenty of water. Do not induce vomiting. If you feel unwell, seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Not Known

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: FIRE-FIGHTING PROCEDURES

5.1 Extinguishing media

Suitable extinguishing media

Product does not burn. Match extinguishing measures to ambient situation.

Unsuitable extinguishing media

Not known.

5.2 Special hazards arising from the substance or mixture

Not known.

5.3 Advice for fire-fighters

Match the fire-fighting procedures to the environmental conditions.

Additional information

Not known.

SECTION 6: ACCIDENTAL RELEASE PROCEDURES

6.1 Personal precautions

Avoid dust accumulation

6.2 Environmental protection measures

Not known

6.3 Methods and material for containment and cleaning up

Pick up mechanically and dispose of properly

6.4 References to other sections

Refer to protective measures in section 7 and 8.

Additional information

Not known.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Information on safe handling

Avoid dust accumulation

Information on fire and explosion protection

No special fire protection measures are necessary

Additional Information

Not Known

7.2 Conditions for safe storage, including any incompatibilities

Information on storage conditions

Always store product in dry conditions.

Requirements for storage rooms and containers

No special requirements needed.

Storage class VCI

LGK 13 (non-combustible solids)

7.3 Specific end use(s)

Dental air abrasion powder for cutting, caries removal and cavity preparation.

8.1 Control parameters

Occupational exposure limit values in the workplace and/or biological limit values

Occupational Exposure Limits (OEL) in Germany for dust

Inhalable fraction (E)	10 mg / m ³
Respirable fraction (A)	1.25 mg / m ³
with exceeding factor 2 each, ref. TRGS 900	

Community exposure limits

Country specific. Please inquire in individual cases.

8.2 Limitation and monitoring of exposure

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over the use of personal protective equipment. Provide adequate ventilation. This can be achieved by local suction or general air extraction.

Aluminium Oxide is not a hazardous substance, thus only the general dust limit value applies.

Suitable assessment methods to verify the effectiveness of the protective measures taken include metrological and non-metrological determination methods as described in the Technical Rules for hazardous substances (TRGS) 4021 and BS EN 14042 "Workplace areas, Guidelines for the implementation and application of processes for assessment of exposure to chemical and biological agents".

Personal protective equipment

The use of personal protective equipment is dependent on the concentrations and quantity of hazardous substances and their use in specific workplaces.

Respiratory protection

Normally, no personal respiratory protective equipment is necessary. In case of insufficient ventilation or exceeded workplace limits, a protective breathing mask should be worn (FFP filtering half mask depending on the existing concentration).

Hand protection

Glove material: Leather

Eye protection

Tight-sealing protective eye-wear (dust-protection goggles) in accordance with EN 166:2001.

Body protection

With normal use, no body protection by half or full-body overall and boots is required.

Information on industrial hygiene

Minimum standards for protective measures when handling working materials are listed in TRGS 500.

Do not eat, drink, smoke or take drugs while using this product.

Avoid contact with skin, eyes and clothing.

Remove soiled or soaked clothing immediately.

Wash hands before breaks and at end of work.

Protect skin by using skin creams.

Environmental protection measures

See sections 6 and 7 ; no further action is required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Appearance	Angular
Physical state	Solid
Colour	White
Odour	Odourless

Safety data

Explosion hazard	The product itself is not explosive; however, formation of explosive air/dust mixtures is possible.
Lower explosion limit	Not known
Upper explosion limit	Not known
Vapour pressure	Not relevant
Specific gravity	Approx. 3.9 to 4.1g/cm ³
Flow time	Not relevant
Water solubility	Insoluble in water
pH value	Not applicable
Boiling point/range	>3000°C
Flash point	Not determined as product is not flammable
Melting point	Approx. 2000°C
Ignition temperature	Not determined as product is not flammable

The information about the explosion limits refers to Alumina. Please refer to the technical data sheet for other physical and chemical data.

9.2 Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Alumina is non-reactive and does not change with proper handling and storage.

10.2 Chemical stability

Alumina is chemically stable and does not change with proper handling and storage.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

No decomposition if used according to specifications.

10.5 Incompatible materials

No hazardous reactions known.

10.6 Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

According to current IFA reports the product contains no silicosis-inducing, toxic or carcinogenic components. The indications given in section 8 of this product information must be observed.

Acute toxicity	No data on the product available
Irritation	No data on the product available
Corrosivity	No data on the product available
Sensitisation	No data on the product available
Repeated dose toxicity	No known toxicity of Alumina
CMR effects (carcinogenic, mutagenic and toxic to reproduction)	No carcinogenic effect according to IFA reports
Summarised evaluation of the CMR properties.	No known CMR properties
Practical experience (relevant for classification and other observations)	No data on the product available
Carcinogenicity	No known carcinogenicity of Alumina
Mutagenicity	No data on the product available
Reproductive toxicity	No data on the product available
Other information	Not known

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No known effects

Ecotoxicity

For Aluminium Oxide no environmental problems are to be expected when handled and used properly.

Fish toxicity

Harmful effects for aquatic organisms are not expected

Aquatic invertebrates

Harmful effects for aquatic organisms are not expected

Water plants

Harmful effects for aquatic organisms are not expected

12.2 Persistence and degradability

Based on current experience, this product is inert and not degradable.

12.3 Bioaccumulation potential

No data available. Accumulation in biological materials is rather unlikely, as it is inert and insoluble.

12.4 Mobility in soil

Potential not known.

12.5 Results of PBT and vPvB assessment

Not relevant. The substances in this product do not meet the criteria for classification as PBT or vPvB.

12.6 Other harmful effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Alumina. If recycling is not possible, waste must be disposed of in compliance with national and local regulations. Confirm the exact waste code with the disposer.

13.2 Packaging

National and local regulations must be followed.

Contaminated packaging

Packaging with Aluminium Oxide residues can be recycled.

Cleaned packaging

Packaging can be reused after being cleaned or recycled.

SECTION 14: TRANSPORT INFORMATION

Alumina is not dangerous goods.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the product

EU Legislation

Not known

National regulations

Water hazard class

Not hazardous to water; classification according to VwVwS, Annex 4.

Technical instruction on air quality (TA-Luft)

Substances not mentioned by name

Hazardous Incident Ordinance (12. BImSchV [German Federal Immission Control Regulation])

Substances not mentioned by name

Solvents Ordinance (31. BImSchV [German Federal Immission Control Regulation])

Substances not mentioned by name

Chemicals Prohibition Ordinance

Substances not mentioned by name.

Relevant Technical Rules for Hazardous Substances

Contains no hazardous substances.

Employment Restrictions

Not Known.

Miscellaneous

Aluminium Oxide is not subject to the VOC regulation.

International regulations

All Aluminium Oxide ingredients are listed with TSCA, A1CS, DSL (NDSL), NEPA and PICCS and registered with MITI / ENCS under 1-23

15.2 Chemical Safety Assessment

Not relevant

SECTION 16: OTHER INFORMATION

Further applicable EC directives

No known effects

Restrictions on use recommended by the manufacturer

For Dental application only.

Literature and data sources.

Regulations

REACH Regulation (EC) No. 1907/2006
CLP Regulation (EC) No. 1272/2008
Hazardous Substances Ordinance (GefStoffV)
Commission Decision 2000/532/EC (AVV)
Transport Regulations according to ADR, RID and IATA
TRGS 900
VOC Regulation (ChemVOCFarbV)

Hazard statements, referred to in section 2 and 3 according to Regulation (EC) No. 1272/2008:

None

Legends

ADR	European agreement concerning the international carriage of dangerous goods by road
AW/EWC	European Waste Catalogue
BImSchV	Regulation on the implementation of the (German) Federal Immission Control Ordinance
CAS	Chemical Abstracts Service
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association - Dangerous Goods Regulations
PBT	Persistent, Bioaccumulative, Toxic
RID	Regulations concerning the International Carriage of Dangerous Goods.
TRGS	Technical Rules for Hazardous Substances.
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds (VOCs)
vPvB	Very persistent and very Bioaccumulative
VwVwS	Administrative Regulation on Substances Hazardous to Water

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Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However no warranty guarantee or representation is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name AQUASOL I/PAC 8200F

Synonyms Biostatic fluid

1.2 Uses of the product

Identified Uses Carrier fluid for dental professional use.

Uses Advised Against None known

1.3 Details of the supplier of the safety data sheet

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SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification

Class 1 Medical Device - Under Directive 93/42 EEC

Classification according to Regulation (EC) 1272/2008

Flammable Liquids (Category 3), H226

For the full text of the H-Statements mentioned in this section, see section 16.

2.2 Label elements

Labelling according to Regulation (EC) 1272/2008.

Pictogram



Signal word

Warning

Hazard statement(s) H226

Flammable liquid and vapour

Precautionary statement(s)

None

Supplemental Hazard

Statements

None

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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Ethanol solution in water/flavoured water

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
Ethanol CAS-No. 64-17-5 EC-No. 200-578-6 Index-No. 603-002-00-5	Flam. Liq 2; Eye Irrit. 2; H225, H319 Concentration limits: >=50 %: Eye Irrit. 2A, H319;	>= 10 - < 20 %

For the full text of the H-Statements mentioned in this Section, see section 16.

SECTION 4: FIRST AID PROCEDURES

4.1 Description of first aid procedures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a doctor.

In case of skin contact

Wash off with soap and plenty of water. Remove contaminated clothing.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a doctor.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects, respiratory paralysis, dermatitis, dizziness, narcosis, inebriation, euphoria, nausea, vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: FIRE-FIGHTING PROCEDURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Combustible vapours are heavier than air.

5.3 Advice for fire-fighters

Wear self-contained breathing apparatus for fire-fighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: ACCIDENTAL RELEASE PROCEDURES

6.1 Personal precautions, protective equipment and emergency procedures.

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods for containment and clean-up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 References to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature 5-30 °C
Storage class (TRGS 510): Flammable Liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: LIMITATION AND MONITORING OF EXPOSURE/PERSONAL PROTECTIVE EQUIPMENT

8.1 Control parameters

Components with workplace control parameters

Components	CAS-No.	Value of exposure	Control Parameters	Basis
Ethanol	64-17-5	TWA	1,000 ppm 1,920 mg/m ³	UK. EH40 WEL - Workplace Exposure Limits
	Remarks	Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used		

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin Protection

Handle with gloves.

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

Body protection

Impervious clothing, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Form: Clear, liquid Colour: Colourless / light straw
Odour	Faint / alcohol
Odour threshold	No data available
PH	5 - 7
Melting point	No data available
Initial boiling point and boiling range	< 100 °C
Flash point	38 °C - closed cup
Evaporation rate	No data available
Flammability (solid,gas)	Not applicable
Upper flammability limit	No data available
Lower flammability limit	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	0.98 g/ml at 20 °C
Water solubility	Completely soluble
Partition coefficient	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	None

9.2 Other safety information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazard reactions

No data available

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Oxidising agents, peroxides. Some types of plastic.

10.6 Hazardous decomposition products

Other decomposition products - No data available in the event of fire : see section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin Corrosion/Irritation

No data available

Serious eye damage/irritation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB 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

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

14.1 UN Number

ADR/RID: 1170

IMDG: 1170

IATA: 1170

14.2 UN proper shipping name

ADR/RID: ETHANOL SOLUTION

IMDG: ETHANOL SOLUTION

IATA: ETHANOL SOLUTION

14.3 Transport hazard class(es)

ADR/RID: 3

IMDG: 3

IATA: 3

14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Environmental hazards

No data available

SECTION 15: REGULATORY INFORMATION

This safety data sheet complies with the requirement of Regulation (EC) No. 453/2010.

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

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: OTHER INFORMATION

Full text of H-statements referred to under sections 2 and 3.

H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.

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Disclaimer

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SAFETY DATA SHEET AQUACARE SODIUM BICARBONATE (ALL GRADES)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name SODIUM BICARBONATE I/PDR 8014F
SODIUM BICARBONATE SOFT I/PDR 8015F

Chemical Name Sodium hydrogencarbonate

Synonyms Bicarbonate of Soda, Baking Soda, Soda Bicarb.

1.2 Uses of the product

Identified Uses Dental polishing agent for professional use.

Uses Advised Against None known

1.3 Details of the supplier of the safety data sheet

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Harlesden
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F +44 (0) 20 8963 1270
enquiries@velopex.com

1.4 Emergency telephone number

020 8965 2913

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008

Not Classified

Classification according to Dangerous Substances Directive 64/548/EEC

Not Classified

2.2 Label elements

Labelling according to Regulation (EC) 1272/2008.

No labelling requirements.

2.3 Other hazards

The substance does not meet the criteria for a PBT or vPvB substance

No other hazards identified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Main constituent	Formula	CAS Number	EC Number	Wt. Percent
Sodium Bicarbonate	NaHCO ₃	144-55-8	205-633-8	97-99 w/w
Silane, reaction products with synthetic amorphous silica, fumed, crystalline-free		68611-44-9	271-893-4	1-3 w/w

SECTION 4: FIRST AID PROCEDURES

4.1 Description of first aid procedures

General advice

No known delayed effects.

Following Inhalation

Move person to fresh air and keep at rest.

Following skin contact

Wash skin with soap and water
If irritation occurs and persists seek medical advice.

Following eye contact

Remove contact lenses if worn
Rinse eye thoroughly with eye wash solution or clean water for at least 10 minutes
Eyelids should be held away from the eyeball to ensure thorough rinsing
Obtain medical attention if necessary

After ingestion

Do NOT induce vomiting.
Wash out mouth with water and give plenty of water to drink (at least 300ml.)
Obtain medical advice if necessary.

SECTION 5: FIRE-FIGHTING PROCEDURES

5.1 Extinguishing media

Suitable extinguishing media

The product is not combustible, all extinguisher products can be used.
Use extinguishing procedures that are appropriate to local circumstances and the surrounding environment

Unsuitable extinguishing media

None

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for fire-fighters

No special precautions required.

SECTION 6: ACCIDENTAL RELEASE PROCEDURES

6.1 Personal precautions

For non-emergency personnel

Keep dust levels to a minimum
Wear suitable protective equipment (see Section 8)

6.2 Environmental precautions

Avoid discharges into the environment (rivers, water courses, sewers etc.)
Avoid any mixture with an acid into sewer/drains (CO₂ gas formation)

6.3 Methods for containment and clean-up

In all cases avoid dust accumulation
Use vacuum suction, or shovel into bags
Store material in a suitable, correctly labelled closed container, preferably for re-use, otherwise for disposal

6.4 References to other sections

For more information on exposure controls/personal protection or disposal considerations, please see section 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures

Keep dust levels to a minimum
Minimise dust generation
Atmospheric levels should be controlled in compliance with the workplace exposure limit (see section 8.1)
Wear protective equipment (see section 8.2)

Advice on general occupation hygiene

Good personal and housekeeping practices
No drinking, eating and smoking at the workplace.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Recommended storage temperature 5-30 °C
Storage class (TRGS 510): Flammable Liquids

SECTION 8: LIMITATION AND MONITORING OF EXPOSURE/PERSONAL PROTECTIVE EQUIPMENT

The information below relates to Sodium Bicarbonate in its pure form.

8.1 Control parameters

Occupational Exposure Limits

Not listed by H&SE (Guidance Note EH40) or ACGIH. However, for good hygiene practice the inert dust Workplace Exposure Limits (WEL) should be adopted

WEL Recommended Limits: 10mg/m³ (total dust) (8hr TWA)
4mg/m³ (respirable dust) (8hr TWA)

DNEL_{Long-term} - After assessment of the physiochemical, toxicokinetic and physiological role of sodium bicarbonate, a DNEL_{Long-term} derivation is considered unnecessary.

DNEL_{Acute} - sodium bicarbonate is considered to be of no toxicological concern, in acute studies no local irritation was noted. A DNEL_{Acute} derivation is considered unnecessary.

PNEC - The lowest L(E)C₅₀ value is > 100 mg/l (48-h EC₅₀ with Daphnia magna is 3,100mg/l) and the lowest chronic value is > 0.1 mg/l (21-d NOEC with Daphnia magna is >576 mg/l). Therefore, sodium bicarbonate is not classified according to EU Directive 67/548/EEC or EU Classification, Regulation, Labelling and Packaging of Substances and Mixtures (CLP) Regulation (EC) No. 1272/2008.

8.2 Exposure controls

Appropriate engineering controls

If user operations generate dust, use process enclosures, local exhaust ventilation, or other engineering control to maintain airborne dust levels below recommended exposure limits.

Personal protection

Eye/face protection

In case of contact with the eye, wear eye/face protection rated to protect eyes against dust (EN 166) eg. safety eye shields with dust protection, goggles or face visor.

Hand protection

Wear suitable protective gloves for frequent or prolonged contact.

Skin/body protection

No special protective equipment required

Respiratory protection

In the case of high dust levels wear suitable respiratory protective equipment e.g. dust mask or respirator, that conform to national/international standard, EN143. Recommended filter type P2.

Environmental exposure controls

Contain any spillage

Avoid discharges to the environment

Dispose of any rinse water in accordance with local and national regulations

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	White crystalline powder
Odour	Odourless
Odour threshold	Not applicable
PH	8.4 (saturated solution, study result, EU method A.6)
Melting point	Decomposes above 50°C (information from peer reviewed handbook)
Boiling point	Not applicable (decomposes on heating)
Flash point	Not applicable (inorganic substance)
Evaporation rate	Not applicable
Flammability	Non-flammable (study result, EU Method A.10)
Upper flammability limit	Non-flammable
Lower flammability limit	Non-flammable
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	2.21 - 2.23 @20°C (study result, EU Method A.3)
Water solubility	93.4g/l @20°C (study result, EU Method A.6)
Partition coefficient	Not applicable
Auto-ignition temperature	Non-flammable
Decomposition temperature	Starts to decompose above 50°C
Viscosity	Not applicable (solid)
Explosive properties	Non-explosive (no chemical groups associated with explosive properties)
Oxidising properties	Non-oxidising (based on the chemical structure of the substance and oxidation states of the constituent elements)

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Decomposes slowly on exposure to water
Reacts with acids, evolving carbon dioxide

10.2 Chemical stability

Stable under recommended storage and handling conditions. (See Section 7)

10.3 Possibility of hazard reactions

No hazardous reactions known

10.4 Conditions to avoid

Contact with acids unless under controlled conditions.
Heating above 50°C - thermal decomposition commences
Exposure to moisture

10.5 Incompatible materials

Acids.

10.6 Hazardous decomposition products

No known hazardous decomposition products

SECTION 11: TOXICOLOGICAL INFORMATION

The information below relates to Sodium Bicarbonate in its pure form.

11.1 Information on toxicological effects

Acute toxicity

Oral LD₅₀, rat : >4000 mg/kg
Inhalation, rat : 4.74 mg/l (low toxic potential)

Not classified according to EU Directive 67/548/EEC and CLP Regulation (EC) No. 1272/2008

Skin Corrosion/Irritation

Non-irritant

Not classified according to EU Directive 67/548/EEC and CLP Regulation (EC) No. 1272/2008

Serious eye damage/irritation

Non-irritant

Not classified according to EU Directive 67/548/EEC and CLP Regulation (EC) No. 1272/2008

Respiratory or skin sensitisation

Considered not to have any sensitising properties, based on the physiological properties of both its constituent ions and the lack of any reported issues

Not classified according to EU Directive 67/548/EEC and CLP Regulation (EC) No. 1272/2008

Germ cell mutagenicity

All test results have proven negative. Sodium bicarbonate is naturally present in cells and the structure does not indicate a genotoxic potential. Therefore sodium bicarbonate is considered not to be genotoxic.

Not classified according to EU Directive 67/548/EEC.

Carcinogenicity

No evidence of sodium bicarbonate having carcinogenic effects

Not classified according to EU Directive 67/548/EEC and CLP Regulation (EC) No. 1272/2008

Reproductive toxicity

No data on reproduction toxicity available. However, based on the normal physiological role of sodium and bicarbonate ions, no toxicity on mammalian or human reproduction is expected

Not classified according to EU Directive 67/548/EEC and CLP Regulation (EC) No. 1272/2008

SECTION 12: ECOLOGICAL INFORMATION

The information below relates to Sodium Bicarbonate in its pure form.

12.1 Toxicity

Fish, <i>Lepomis macrochirus</i>	: 96hr-LC ₅₀ , 7100 mg/l
Fish, <i>Lepomis macrochirus</i>	: 96hr-NOEC, 5200 mg/l
Invertebrates, <i>Daphnia magna</i>	: 48hr-LC ₅₀ , 4100 mg/l
Invertebrates, <i>Daphnia magna</i>	: 48hr-NOEC 3100 mg/l
Invertebrates, <i>Daphnia magna</i>	: 21day-NOEC >576 mg/l

12.2 Persistence and degradability

In water	: Not applicable (quickly dissociates)
In soil	: Not applicable (inorganic substance)
In sediment	: Not applicable (inorganic substance)

12.3 Bioaccumulative potential

Not applicable (inorganic substance)

12.4 Mobility in soil

Not applicable (partition coefficient measurement not required, inorganic substance)

12.5 Results of PBT and vPvB assessment

According to Annex XIII of REACH Regulation, inorganic substances do not require assessment

12.6 Other harmful effects

No other adverse effects are identified.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

If recycling spilled product is not practicable, dispose of in compliance with local or national regulations.
Dissolve in water and neutralise with an acid, under controlled conditions.
Do not dispose of directly with acids.

Packaging:

Where possible, recycling is preferred to disposal or incineration.
Clean container with water, dispose of rinse water in accordance with local or national regulations
Must be incinerated in a registered incineration plant with permit from the local authorities.

SECTION 14: TRANSPORT INFORMATION

Sodium bicarbonate is not classified as hazardous for transport.

14.1 UN Number

Not regulated

14.2 UN proper shipping name

Not regulated

14.3 Transport hazard class(es)

Land Transport	: ADR/RID	Not restricted
Inland Waterway Transport	: ADN	Not regulated
Sea Transport	: IMO/IMDG	Not regulated
Air Transport	: ICAO-TI/IATA-DGR	Not regulated

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations

Water Hazard Class : WGK 1, VwVwS (Germany)
TSCA Inventory Listed

15.2 Chemical Safety Assessment

A Chemical Safety Assessment/Report (CSA/CSR) has been undertaken on sodium bicarbonate

SECTION 16: OTHER INFORMATION

16.1 Indication of changes

Section 1 - change of logo

16.2 Abbreviations and acronyms

WEL : Workplace exposure limit
ACGIH : American Conference of Industrial Hygiene
TWA : Time Weighted Average
DNEL : Derived No Effect Level
NOEC : No Observed Effect Concentration
PBT : Persistent, Bioaccumulative, Toxic
vPvB : very Persistent, very Bioaccumulative
PNEC : Predicted No Effect Concentration
ADR : European Agreement Concerning the International Carriage of Dangerous Goods by Road
RID : International Rule for Transport of Dangerous Substances by Rail
ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterway
IMO/IMDG : International Maritime Organization/International Maritime Dangerous Goods Code
ICAO/IATA : International Civil Aviation Organization/International Air Transport Association
OECD : Organisation for Economic Co-Operation and Development
SIDS : Screening Information Data Set

16.3 Key literature references and sources of data

Data is taken from the Chemical Safety Report (CSR) and/or OECD SIDS report for sodium bicarbonate.

16.4 Further information

The substance(s) covered in this document do not legally require a Safety Data Sheet (SDS).

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products.

Issued by : Chemistry Manager
Revision Date : 01/03/2020
Revision : GHS1

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the users' responsibility to satisfy themselves as to the suitability of such information for their own particular use.

**SYLC
SAFETY DATA SHEET
AQUACARE DESENSITISING BIOGLASS**

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name SYLC I/PDR 0034F
Synonyms (Desensitising Bioglass)

1.2 Uses of the product

Identified Uses Only for use by a dental professional, for the treatment of dental hypersensitivity and prophylaxis treatment.
Uses Advised Against None known

1.3 Details of the supplier of the safety data sheet

Supplier Medivance Instruments Ltd.
Barretts Green Road
Harlesden
London
NW10 7AP
T +44 (0) 20 8965 2913
F +44 (0) 20 8963 1270
enquiries@velopex.com

1.4 Emergency telephone number

020 8965 2913

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Class 1 Medical Device - Under Directive 93/42 EEC

2.1 Classification of substance

Not a hazardous substance or mixture according to Regulation no. 1272/2008.
This substance is not classified as dangerous according to directive 67/548/EEC.

2.2. Label Elements

As required by Medical Device Directive

2.3 Other hazard information

Ingestion This material is unlikely to be hazardous by ingestion.
Skin contact Not absorbed through skin. No evidence of adverse effects.
Eye contact May cause irritation, redness and pain.
Inhalation Inhaling very large quantities (overexposure to particles) may cause temporary irritation to mucous membranes.
Environment: vPvB/PBT No known effect
Additional information No other risks known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Calcium Sodium Phosphosilicate

Elemental Component	Wt.%
Silicon	21
Calcium	18
Sodium	18
Phosphorus	3
Oxygen	40

3.2 Mixture

Not a mixture – Fused Glass

Description:	White powder
Hazardous components:	N/A
CAS Number	359684-27-8
REACH Number	A registration number is not available as the substance or its uses are exempted from registration, the annual tonnage does not require registration or the registration is envisaged for a later registration deadline.
Synonyms	Bioactive Glass; NovaMin; 45S5 Bioglass; calcium sodium phosphosilicate
Formula	n/a
Molecular Weight	n/a
EC-No. :	n/a

SECTION 4: FIRST AID PROCEDURES

4.1 Description of first aid measures

If inhalation

Remove from exposure. Get medical attention if experiencing over exposure effects

In case of skin contact

Wash with plenty of soap and water.

In case of eye contact

Flush with water for several minutes. Get medical attention. Take care not to rub eyes as glass particles may scratch surface of eye.

If swallowed

Induce vomiting in a conscious person, get medical attention

4.2 Most important symptoms and effects, both acute and delayed

Inhalation:	Irritation and inflammation are unlikely but possible symptoms
Ingestion:	Irritation and inflammation are unlikely but possible symptoms
Skin contact:	Irritation and inflammation are unlikely but possible symptoms
Eye contact:	Irritation and inflammation are unlikely but possible symptoms

4.3 Indication of any immediate medical attention and special treatment needed

Irritation and inflammation.

SECTION 5: FIRE-FIGHTING PROCEDURES

5.1 Extinguishing media

Small fires	Non-combustible. Use extinguishing media appropriate to surrounding fire conditions.
Large fires	Non-combustible. Use extinguishing media appropriate to surrounding fire conditions.

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for fire-fighters

None

SECTION 6: ACCIDENTAL RELEASE PROCEDURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid ingestion and contact with eyes. For personal protection see section 8.

6.2 Environmental precautions

None

6.3 Methods for containment and clean-up

Spills should be cleaned up with a broom and dust pan or vacuum depending on size of spill. Take care not to inhale or ingest dust. Waste can be placed in a plastic trash bag to be disposed of according to applicable regulations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Dust mask class FFP1 or higher
Protective safety glasses
Disposable examination gloves

7.2 Conditions for safe storage, including any incompatibilities

No special precautions necessary. It is recommended that material be stored in unopened containers at ambient temperature and humidity (rH<70%).

7.3 Specific end use(s)

Waste can be placed in a plastic trash bag to be disposed of according to applicable regulations.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Dust mask class FFP1 or higher
Protective safety glasses
Disposable examination gloves

8.2 Exposure controls

Use with adequate ventilation



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance/Form	Powder
Colour	White
Odour/odour threshold	None/ None
Change in condition	None
Melting point/melting range	1300 °C
Boiling point/boiling range	n/a
Freezing point	700°C
Evaporation rate	Not applicable
Flash point	Not applicable
Auto ignition temperature	Not applicable
Explosive properties	Not applicable
Decomposition temperature	Not applicable
Density	2.73g/cm ³
Vapour pressure	Not applicable
Viscosity	Not applicable
PH	7-14 in aqueous environment
Solubility in/miscibility with water	Not soluble
Content of solvents	None
Organic content	None
Water content	None
Other information	None

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None

10.2 Chemical stability

Highly Stable

10.3 Possibility of hazard reactions

None

10.4 Conditions to avoid

Moisture

10.5 Incompatible materials

None

10.6 Hazardous decomposition products

None

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:	None.
Skin corrosion/irritation	Irritant
Serious eye damage/irritation	Irritant
Respiratory/skin sensitisation:	Irritant
Germ cell mutagenicity	None known
Carcinogenicity	None known
Reproductive toxicity	None known
STOT – single exposure	None known
STOT – repeated exposure	None known
Aspiration hazard	None

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

None known

12.2 Persistence and degradability

Stable to decomposition. Long term effects may include slight leaching of Na, Ca and P

12.3 Bioaccumulative potential

None known.

12.4 Mobility in soil

None known

12.5 Results of PBT and vPvB assessment

Not applicable to medical device.

12.6 Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Glass recycling or land fill.

SECTION 14: TRANSPORT INFORMATION

14.1 UN Number

ADR/RID: Not applicable
IMDG: Not applicable
IATA: Not applicable

14.2 UN proper shipping name

ADR/RID: Not dangerous goods.
IMDG: Not dangerous goods.
IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: Not applicable.
IMDG: Not applicable
IATA: Not applicable

14.4 Packaging group

ADR/RID: Not applicable.
IMDG: Not applicable
IATA: Not applicable

14.5 Environmental hazards

ADR/RID: Not applicable.
IMDG: Not applicable
IATA: Not applicable

14.6 Special precautions for user

Follow instructions in Directions For Use

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

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

15.2 Chemical Safety Assessment

Contains no known hazard.

SECTION 16: OTHER INFORMATION

16.1 Information

The above information is based on our present day knowledge and relates solely to the safety requirements of the product. It does not constitute a guarantee for any specific property. Users of the product should satisfy themselves that the information is sufficient for their specific circumstances of use.

16.2 Abbreviations and acronyms

WEL : Workplace exposure limit

ACGIH : American Conference of Industrial Hygiene

TWA : Time Weighted Average

DNEL : Derived no effect level

NOEC : No Observed Effect Concentration

PBT : Persistent, Bioaccumulative, Toxic

vPvB : very Persistent, very Bioaccumulative

PNEC : Predicted No Effect Concentration

ADR : European Agreement Concerning the International Carriage of Dangerous Goods by Road

RID : International Rule for Transport of Dangerous Substances by Rail

ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterway

IMO/IMDG : International Maritime Organization/International Maritime Dangerous Goods Code

ICAO/IATA : International Civil Aviation Organization/International Air Transport Association

16.3 Key literature references and sources of data

Data is taken from the Chemical Safety Report (CSR) and/or OECD SIDS report for sodium bicarbonate.

16.4 Further information

The substance(s) covered in this document do not legally require a Safety Data Sheet (SDS).

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge.

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Issued by Chemistry Manager

Revision Date 01/03/2020

Revision GHS1

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SICHERHEITSDATENBLATT AQUACARE NATRIUMBICARBONAT (STANDARD - SOFT)

ABSCHNITT 1: BEZEICHNUNG DES PRODUKTS UND DES UNTERNEHMENS

1.1 Produktidentifikator/en

Produktbezeichnung	SODIUM BICARBONATE STANDARD (FINE) - 65 Micron - I/PDR 8014F SODIUM BICARBONATE SOFT (MICROFINE) - 35 Micron - I/PDR 8015F
Chemische Bezeichnung	Natriumhydrogencarbonat
Synonyme	Natron, Backpulver, Natriumbicarb.

1.2 Verwendungen des Produktes

Identifizierte Verwendungen	Zahnpoliermittel für den professionellen Einsatz.
Verwendungen, von denen abgeraten wird	Keine bekannt

1.3 Angaben zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt

Lieferant	Medivance Instruments Ltd. Barretts Green Road Harlesden London NW10 7AP T +44 (0) 20 8965 2913 F +44 (0) 20 8963 1270 enquiries@velopex.com
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1.4 Notrufnummer

020 8965 2913

ABSCHNITT 2: GEFAHRENKENNZEICHNUNG

2.1 Einstufung der Substanz oder des Gemischs

Einstufung gemäß der Verordnung (EG) 1272/2008

Keine Einstufung

Einstufung gemäß der Gefahrstoffrichtlinie 64/548/EEC

Keine Einstufung

2.2 Kennzeichnungselemente

Kennzeichnung gemäß der Verordnung (EG) 1272/2008.

Keine Kennzeichnungspflichten.

2.3 Sonstige Gefahren

Die Substanz erfüllt nicht die Kriterien für eine PBT- oder vPvB-Substanz

Keine anderen Gefahren identifiziert.

ABSCHNITT 3: ZUSAMMENSETZUNG/ANGABEN ZU BESTANDTEILEN

3.1 Substanz

Hauptbestandteil	Formel	CAS-Nummer	EG-Nummer	Gew.-Prozent
Natriumhydrogencarbonat	NaHCO ₃	144-55-8	205-633-8	97-99 w/w
Silan, Reaktionsprodukte mit synthetisch amorphes Siliciumdioxid, pyrogen, kristallfrei		68611-44-9	271-893-4	1-3 w/w

ABSCHNITT 4: ERSTE-HILFE-MASSNAHMEN

4.1 Beschreibung der Erste-Hilfe-Maßnahmen

Allgemeiner Hinweis

Keine verzögerten Wirkungen bekannt.

Nach Einatmen

Bringen Sie die betroffene Person an die frische Luft und halten Sie sie ruhig.

Nach Hautkontakt

Waschen Sie die Haut mit Seife und Wasser
Holen Sie sich ärztlichen Rat, wenn Reizungen auftreten und von Dauer sein sollten.

Nach Augenkontakt

Kontaktlinsen gegebenenfalls herausnehmen.
Spülen Sie das Auge gründlich mit Augenspüllösung oder sauberen Wasser für mindestens 10 Minuten
Augenlider sollten vom Augapfel angehoben werden, um eine gründliche Spülung zu ermöglichen
Begeben Sie sich gegebenenfalls in ärztliche Behandlung.

Nach Einnahme

Führen Sie KEIN Erbrechen herbei.
Waschen Sie den Mund mit Wasser aus und verabreichen Sie ausreichend Flüssigkeit (mindestens 300 ml)
Holen Sie sich gegebenenfalls in ärztlichen Rat ein.

ABSCHNITT 5: MASSNAHMEN ZUR BRANDBEKÄMPFUNG

5.1 Löschmittel

Geeignete Löschmittel

Dieses Produkt ist nicht brennbar, alle Feuerlöschprodukte können verwendet werden.
Wenden Sie Feuerlöschverfahren an, die den lokalen Umständen und Gegebenheiten entsprechen.

Ungeeignete Löschmittel

Keine

5.2 Besondere vom Produkt ausgehende Gefahren

Keine

5.3 Hinweise für die Brandbekämpfung

Keine speziellen Vorsichtsmaßnahmen erforderlich.

ABSCHNITT 6: MASSNAHMEN BEI UNBEABSICHTIGTER FREISETZUNG

6.1 Personenbezogene Vorsichtsmaßnahmen

Für nicht für Notfälle geschultes Personal

Halten Sie Staubkonzentrationen so gering wie möglich
Tragen Sie geeignete Schutzausrüstung (siehe Teil 8)

6.2 Umweltschutzmaßnahmen

Vermeiden Sie Austritte in die Umwelt (Flüsse, Wasserläufe, Kanalisation usw.)
Verhindern Sie die Einleitung von säurehaltigen Gemischen in die Kanalisation/das Abwasser (CO₂-Gasbildung)

6.3 Methoden für Rückhaltung und Reinigung

Vermeiden Sie in jedem Fall Staubansammlungen
Staubsauger benutzen oder in Säcke schaufeln
Bewahren Sie das Material in einem geeigneten, ordnungsgemäß gekennzeichneten geschlossenen Behälter vorzugsweise zur Wiederverwendung, andernfalls zur Entsorgung auf

6.4 Verweis auf andere Abschnitte

Für weitere Informationen zu Expositionsüberwachung/Hinweisen zum persönlichen Schutz und zur Entsorgung siehe Teil 8 und 13.

ABSCHNITT 7: HANDHABUNG UND LAGERUNG

7.1 Schutzmaßnahmen zur sicheren Handhabung

Vorsichtsmaßnahmen

Staubkonzentrationen minimal halten
Stauberzeugung minimieren
Konzentrationen in der Luft sollten in Übereinstimmung mit den Grenzwerten zur Exposition am Arbeitsplatz überprüft werden (siehe Teil 8.1)
Tragen Sie Schutzausrüstung (siehe Teil 8.2)

Hinweis zu allgemeinen Hygiene am Arbeitsplatz

Gute persönliche Ordnung und Sauberkeit
Kein Alkohol, Essen und Rauchen am Arbeitsplatz.

7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten

Kühl aufbewahren. Behälter fest verschlossen an einem trockenen und gut belüfteten Ort aufbewahren. Geöffnete Behälter müssen sorgfältig wieder verschlossen und in einer aufrechten Position aufbewahrt werden, um ein Auslaufen zu verhindern.
Empfohlene Lagertemperatur 5–30 °C
Lagerklasse (TRGS 510): Entzündbare Flüssigkeiten

ABSCHNITT 8: BEGRENZUNG UND ÜBERWACHUNG DER EXPOSITION/PERSÖNLICHE SCHUTZAUSRÜSTUNGEN

Die nachstehenden Informationen beziehen sich auf Natriumbicarbonat in seiner reinen Form.

8.1 Zu überwachende Parameter

Grenzwerte für die Exposition am Arbeitsplatz

Nicht von H&SE (Richtlinie EH40) oder ACGIH gelistet. Trotzdem sollten aus Hygieneschutzgründen die Grenzwerte für die Exposition am Arbeitsplatz (WEL) bezüglich Inerstaub übernommen werden.

Empfohlene WEL-Grenzwerte: 10 mg/m³ (Gesamtstaub) (8 h TWA)
4 mg/m³ (lungengängiger Staub) (8 h TWA)

- DNEL_{Langzeit} – Nach Bewertung der physiochemischen, toxikokinetischen und physiologischen Rolle von Natriumbicarbonat wurde eine Ableitung des DNEL_{Langzeit} als nicht notwendig erachtet.
- DNEL_{Akut} – Natriumbicarbonat wird als toxikologisch unbedenklich erachtet; in Akutstudien wurden keine lokalen Reizungen festgestellt. Die Ableitung eines DNEL_{Akut} wird als nicht notwendig erachtet.
- PNEC – Der niedrigste L(E)C₅₀-Wert beträgt > 100 mg/l (48h-EC₅₀ mit Daphnia magna beträgt 3.100 mg/l) und der niedrigste chronische Wert beträgt > 0,1 mg/l (21d-NOEC mit Daphnia magna beträgt > 576 mg/l). Somit ist Natriumbicarbonat nicht nach EU-Richtlinie 67/548/EEC oder EG zur Einstufung, Regulierung, Kennzeichnung und Verpackung von Stoffen und Gemischen (CLP)-Verordnung (EG) Nr. 1272/2008 eingestuft.

8.2. Expositionskontrollen

Geeignete technische Steuereinrichtungen

Bei Staubbildung während Bedienungsvorgängen sind Prozesskammern, örtliche Abluftanlagen oder andere technische Einrichtungen zu verwenden, um die Staubkonzentrationen in der Luft unter den empfohlenen Grenzwerten zu halten.

Persönliche Schutzausrüstung Augen-/Gesichtsschutz

Bei Augenkontakt Augen-/Gesichtsschutz tragen, welcher der Norm zum Schutz der Augen vor Staub (EN 166) entspricht, z. B. Augenschutz mit Staubschutz, Schutzbrillen oder Gesichtsschutz mit Visier.

Handschutz

Für häufigen und längeren Kontakt geeignete Schutzhandschuhe tragen.

Haut-/Körperschutz

Keine spezielle Schutzausrüstung erforderlich

Atemschutz

Bei hohen Staubkonzentrationen geeignete Atemschutzausrüstung tragen, z. B. Staubmasken oder Atemschutzgeräte, die der nationalen/internationalen Norm, EN 143, entspricht. Empfohlener Filtertyp P2.

Überwachung der Umweltexposition

Verschüttungen eindämmen

Freisetzung in die Umwelt vermeiden

Spülwasser ist gemäß den lokalen und nationale Bestimmungen zu entsorgen

ABSCHNITT 9: PHYSIKALISCHE UND CHEMISCHE EIGENSCHAFTEN

9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften

Erscheinungsbild	Weißes kristallines Pulver
Geruch	Geruchlos
Geruchsschwelle	Nicht anwendbar
pH	8.4 (gesättigte Lösung, Studienergebnis, Methode EU A.6)
Schmelzpunkt	Zersetzt sich über 50 °C (Angaben aus Peer Review unterzogenem Handbuch)
Siedepunkt	Nicht anwendbar (zersetzt sich bei Erhitzung)
Flammpunkt	Nicht anwendbar (anorganische Substanz)
Verdunstungsrate	Nicht anwendbar
Entflammbarkeit	Nicht entflammbar (Studienergebnis, Methode EU A.10)
Obere Entflammbarkeitsgrenze	Nicht entflammbar
Untere Entflammbarkeitsgrenze	Nicht entflammbar
Dampfdruck	Nicht anwendbar
Dampfdichte	Nicht anwendbar
Relative Dichte	2,21–2,23 bei 20 °C (Studienergebnis, Methode EU A.3)
Wasserlöslichkeit	93,4 g/l bei 20 °C (Studienergebnis, Methode EU A.6)
Verteilungskoeffizient	Nicht anwendbar
Selbstzündungstemperatur	Nicht entflammbar
Zersetzungstemperatur	Beginnt sich bei über 50 °C zu zersetzen
Viskosität	Nicht anwendbar (fest)
Explosive Eigenschaften	Nicht explosiv (keine chemischen Gruppen in Zusammenhang mit explosiven Eigenschaften)
Brandfördernde Eigenschaften	Nicht brandfördernd (basierend auf der chemischen Struktur der Substanz und den Oxidationszuständen der Bestandteile)

ABSCHNITT 10: STABILITÄT UND REAKTIVITÄT

10.1 Reaktivität

Zersetzt sich langsam bei Exposition gegenüber Wasser
Reagiert mit Säuren, Entwicklung von Kohlenstoffdioxid

10.2 Chemische Stabilität

Stabil unter empfohlenen Lager- und Handhabungsbedingungen. (Siehe Abschnitt 7)

10.3 Möglichkeit gefährlicher Reaktionen

Keine gefährlichen Reaktionen bekannt

10.4 Zu vermeidende Bedingungen

Kontakt mit Säuren nur unter kontrollierten Bedingungen.
Erhitzen auf über 50 °C – Beginn der thermischen Zersetzung
Exposition gegenüber Feuchtigkeit

10.5 Unverträgliche Materialien

Säuren.

10.6 Gefährliche Zersetzungsprodukte

Keine gefährlichen Zersetzungsprodukte bekannt

ABSCHNITT 11: TOXIKOLOGISCHE ANGABEN

Die nachstehenden Informationen beziehen sich auf Natriumbicarbonat in seiner reinen Form.

11.1 Angaben zu toxikologischen Wirkungen

Akute Toxizität

Oraler LD₅₀, Ratte : > 4000 mg/kg

Einatmung, Ratte : 4,74 mg/l (niedriges toxisches Potenzial)

Nicht eingestuft nach EU-Richtlinie 67/548/EEC und CLP-Verordnung (EG) Nr. 1272/2008

Hautkorrosion/-reizung

Reizfrei

Nicht eingestuft nach EU-Richtlinie 67/548/EEC und CLP-Verordnung (EG) Nr. 1272/2008

Schwere Augenschäden/-reizung

Reizfrei

Nicht eingestuft nach EU-Richtlinie 67/548/EEC und CLP-Verordnung (EG) Nr. 1272/2008

Sensibilisierung der Haut und der Atemwege

Als keine sensibilisierenden Eigenschaften aufweisend erachtet, basierend auf den physiologischen Eigenschaften der Ionen der beiden Bestandteile als auch dem Fehlen von Problemliteratur

Nicht eingestuft nach EU-Richtlinie 67/548/EEC und CLP-Verordnung (EG) Nr. 1272/2008

Keimzellmutagenität

Alle Testergebnisse erwiesen sich als negativ. Natriumbicarbonat ist natürlicher Bestandteil von Zellen und seine Struktur lässt kein genotoxisches Potenzial vermuten. Somit wird Natriumbicarbonat als nicht genotoxisch erachtet.

Nicht eingestuft nach EU-Richtlinie 67/548/EEC.

Kanzerogenität

Kein Anzeichen für krebserregende Wirkungen

Nicht eingestuft nach EU-Richtlinie 67/548/EEC und CLP-Verordnung (EG) Nr. 1272/2008

Reproduktionstoxizität

Keine Daten zur Reproduktionstoxizität verfügbar. Allerdings wird basierend auf der normalen physiologischen Rolle von Natriumbicarbonat-Ionen keine Toxizität für die Reproduktion bei Säugern oder Menschen erwartet

Nicht eingestuft nach EU-Richtlinie 67/548/EEC und CLP-Verordnung (EG) Nr. 1272/2008

ABSCHNITT 12: ÖKOLOGISCHE ANGABEN

Die nachstehenden Informationen beziehen sich auf Natriumbicarbonat in seiner reinen Form.

12.1 Toxizität

Fisch, Lepomis macrochirus	: 96h-LC ₅₀ , 7100 mg/l
Fisch, Lepomis macrochirus	: 96h-NOEC, 5200 mg/l
Wirbellose, Daphnia magna	: 48h-LC ₅₀ , 4100 mg/l
Wirbellose, Daphnia magna	: 48h-NOEC 3100 mg/l
Wirbellose, Daphnia magna	: 21Tage-NOEC > 576 mg/l

12.2 Persistenz und Abbaubarkeit

In Wasser	: Nicht anwendbar (dissoziiert schnell)
Im Boden	: Nicht anwendbar (anorganische Substanz)
In Sedimenten	: Nicht anwendbar (anorganische Substanz)

12.3 Bioakkumulationspotenzial

Nicht anwendbar (anorganische Substanz)

12.4 Mobilität im Boden

Nicht anwendbar (Verteilungskoeffizientmessung nicht erforderlich, anorganische Substanz)

12.5 Ergebnisse der PBT- und vPvB-Bewertung

Gemäß Anhang XIII der REACH-Verordnung ist für anorganische Substanzen keine Bewertung erforderlich

12.6 Andere schädliche Wirkungen

Keine anderen schädlichen Wirkungen identifiziert.

ABSCHNITT 13: HINWEISE ZUR ENTSORGUNG

13.1 Verfahren der Abfallbehandlung

Falls verschüttetes Material nicht wiederverwendbar ist, gemäß den lokalen und nationalen Bestimmungen entsorgen.
Unter kontrollierten Bedingungen in Wasser auflösen und mit einer Säure neutralisieren.
Nicht direkt mit Säuren entsorgen.

Verpackung:

Wenn möglich, ist die Wiederverwertung der Entsorgung oder Verbrennung vorzuziehen.
Behälter mit Wasser reinigen, Spülwasser gemäß den lokalen und nationalen Bestimmungen entsorgen
Die Verbrennung muss in einer eingetragenen Verbrennungsanlage mit Zustimmung der zuständigen Behörden erfolgen.

ABSCHNITT 14: Transportinformationen

Natriumbicarbonat ist als nicht gefährlich für den Transport eingestuft.

14.1 UN-Nummer

Nicht reguliert

14.2 Ordnungsgemäße UN-Versandbezeichnung

Nicht reguliert

14.3 Transportgefahrenklasse(n)

Landverkehr	: ADR/RID	Nicht eingeschränkt
Binnenschifffahrt	: ADN	Nicht reguliert
Seetransport	: IMO/IMDG	Nicht reguliert
Lufttransport	: ICAO-TI/IATA-DGR	Nicht reguliert

ABSCHNITT 15: VORGESCHRIEBENE INFORMATIONEN

15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz

Wassergefährdungsklasse : WGK 1, VwVwS
TSCA-Bestandsverzeichnis Gelistet

15.2 Stoffsicherheitsbeurteilung

Bei Natriumbicarbonat wurde eine Stoffsicherheitsbeurteilung durchgeführt und ein entsprechender Bericht (CSA/CSR) verfasst

ABSCHNITT 16: SONSTIGE INFORMATIONEN

16.1 Hinweis auf Änderung

Abschnitt 1 – Änderung des Logos

16.2 Abkürzungen und Akronyme

WEL : Grenzwert für die Exposition
ACGIH : American Conference of Industrial Hygiene
TWA : Zeitlich gewichteter Mittelwert
DNEL : Derived No Effect Level
NOEC : No Observed Effect Concentration
PBT : Persistent, bioakkumulierbar, toxisch
vPvB : sehr persistent, sehr bioakkumulierbar
PNEC : Predicted No Effect Concentration
ADR : Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf der Straße
RID : Internationale Vorschriften für die Beförderung von Gefahrstoffen im Eisenbahnverkehr
ADN : Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf Binnenwasserstraßen
IMO/IMDG : Internationale Seeschiffahrtsorganisation/Internationaler Code für die Beförderung gefährlicher Güter mit Seeschiffen
ICAO/IATA : Internationale Zivilluftfahrtorganisation/Internationaler Luftverkehrsverband
OECD : Organisation für wirtschaftliche Zusammenarbeit und Entwicklung
SIDS : Screening Information Data Set

16.3 Wichtige Literaturangaben und Datenquellen

Die Daten sind dem Stoffsicherheitsbericht (CSR) und/oder dem OECD-SIDS-Bericht zu Natriumbicarbonat entnommen.

16.4 Weitere Angaben

Für die in diesem Dokument aufgeführte(n) Substanz(en) ist kein gesetzlich vorgeschriebenes Datensicherheitsblatt (SDS) erforderlich.

Die vorstehenden Angaben beschreiben lediglich die Sicherheitsanforderungen für das Produkt und basieren auf dem heutigen Stand unserer Kenntnisse.

Die Angaben dienen dazu, Ratschläge hinsichtlich der Lagerung, Verarbeitung und Beförderung zur sicheren Handhabung des in diesem Datensicherheitsblatt genannten Produkts zu geben. Die Angaben sind nicht auf andere Produkte übertragbar.

Ausgegeben von : Chemistry Manager
Überarbeitungsdatum : 05/02/2021
Überarbeitung : GHS1

Haftungsausschluss

Diese Informationen beziehen sich nur auf dieses bestimmte Produkt und nicht auf solche Stoffe, die in Kombination mit irgendwelchen anderen Stoffen oder Verfahren verwendet werden. Diese Angaben sind nach bestem Wissen des Unternehmens recherchiert und stützen sich auf den Kenntnisstand zum angegebenen Datum. Dabei wird jedoch keine Erklärung, Garantie bzw. Zusicherung hinsichtlich der Genauigkeit, Zuverlässigkeit oder Vollständigkeit gegeben. Die Anwender selbst sind dafür verantwortlich, sich von der Eignung dieser Angaben für ihren eigenen Gebrauch zu überzeugen.