

# SAFETY DATA SHEET SODIUM BICARBONATE

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

## 1.1. Product identifier

Product name SODIUM BICARBONATE

Product number 20290

Synonyms; trade names PH STABILISER, BRISWIM PH STABILISER, BICARBONATE OF SODA, BRISWIM SPA

ALK, SODIUM BICARBONATE TEC 0-50, SOD BICARBONATE CODEX PH 0-13, SOD BICARBONATE ULTRACOARSE GRAN TTA, SODIUM BICARBONATE FOOD POWDER, BICAR CODEX, SODIUM BICARBONATE FCC ed. 7, SOD BICARBONATE PHARMA 0/13D, SOD BICARBONATE PDR MSDQ, SOD BICAR PH EXCIPIENT 0/13, SOD BICARBONATE U COARSE HAEMO, BICAR PHARMA EXCIP 27-50, SODIUM HYDROGENCARBONATE, BICAR PHARMA EXCIP 0-10, SODIUM BICARBONATE FOOD 0-13 E500 R, SODIUM BICARBONATE FOOD GRADE, SODIUM BICARBONATE E500, BICARBONATE COARSE GRANULAR EP/USP, SOD BICARBONATE MED FG/EP, BICAR FOOD 0-13, BICAR PHARMA API, SOD BICARBONATE FREE FLOW FG, SOD BICARBONATE FG FINE PDR, SOD BICARBONATE EXTRA FINE FG/EP, SOD BICARBONATE U COARSE FG/EP, SOD

BICARBONATE COARSE FG/EP, SOD BICARBONATE TECH PDR

**REACH registration number** 01-2119457606-32-XXXX

**CAS number** 144-55-8 **EC number** 205-633-8

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

Identified uses Detergent. Industrial application Chemical Food in the Food Industy Food / Feed additive

Neutralising agent Cosmetics Pharmaceuticals Water Treatment

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

Supplier Soak Rochford Ltd,

18 King Street Industrial Estate,

Langtoft, Peterborough, PE6 9NF

sales@soakrochford.co.uk

# 1.4. Emergency telephone number

Emergency telephone 01733 973950 (office hours)

**Sds No.** 20290

## SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

## **SODIUM BICARBONATE**

Health hazards Not Classified

Environmental hazards Not Classified

2.2. Label elements

**EC number** 205-633-8

Hazard statements NC Not Classified

## 2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

# SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Product name SODIUM BICARBONATE

REACH registration number 01-2119457606-32-XXXX

**CAS number** 144-55-8 **EC number** 205-633-8

## SECTION 4: First aid measures

## 4.1. Description of first aid measures

**Inhalation** Remove affected person from source of contamination. Move affected person to fresh air and

keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with

water. Get medical attention if any discomfort continues.

**Ingestion** Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get

medical attention if any discomfort continues.

Skin contact Remove affected person from source of contamination. Remove contaminated clothing. Wash

skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after

washing.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms

occur after washing.

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

**Eye contact** May cause temporary eye irritation.

## 4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor 
No specific recommendations. If in doubt, get medical attention promptly.

## SECTION 5: Firefighting measures

# 5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing

Do not use water jet as an extinguisher, as this will spread the fire.

media

## 5.2. Special hazards arising from the substance or mixture

Specific hazards When heated and in case of fire, toxic vapours/gases may be formed. Dust may form

explosive mixture with air.

Hazardous combustion

products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of the following substances: Carbon.

## 5.3. Advice for firefighters

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothing.

# SECTION 6: Accidental release measures

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

Personal precautions

Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of dust and contact with skin and eyes.

#### 6.2. Environmental precautions

**Environmental precautions** 

Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

## 6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Avoid generation and spreading of dust. Remove spillage with vacuum cleaner or collect with a shovel and broom, or similar. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. For waste disposal, see Section 13.

## 6.4. Reference to other sections

Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Usage precautions

Provide adequate ventilation. Avoid handling which leads to dust formation. Avoid contact with skin and eyes. Avoid spilling. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet.

Advice on general occupational hygiene

Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Observe good chemical hygiene practices.

# 7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

#### SECTION 8: Exposure controls/Personal protection

# 8.1. Control parameters

Ingredient comments

No exposure limits known for ingredient(s).

## 8.2. Exposure controls

## Protective equipment







Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least 8 hours. Polyvinyl chloride (PVC). To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures

When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Eye wash facilities and emergency shower must be available when handling this product.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m3. If ventilation is inadequate, suitable respiratory protection must be worn. Particulate filter, type P2. EN 136/140/141/145/143/149

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Appearance Crystalline powder. Granules.

Colour White.

Odour Odourless.

Odour threshold No information available.

pH (diluted solution): 8.4 (~8.4 g/l)

Melting pointNo information available.Initial boiling point and rangeNo information available.Flash pointNo information available.

Evaporation rate

No information available.

Evaporation factor

No information available.

Flammability (solid, gas) No information available.

Upper/lower flammability or

explosive limits

No information available.

Other flammability No information available.

# **SODIUM BICARBONATE**

Vapour pressure

No information available.

Vapour density

No information available.

Relative density 0.98 - 2.23

Bulk density 0.5 - 1.3 kg/m<sup>3</sup>

Solubility(ies) 9.3 - 9.5 Soluble in water.

Partition coefficient No information available.

Auto-ignition temperature No information available.

**Decomposition Temperature** > 50°C

Viscosity

No information available.

Explosive properties

No information available.

Explosive under the influence

of a flame

No information available.

Oxidising properties No information available.

9.2. Other information

Refractive index No information available.

Particle size No information available.

Molecular weight 84.01

Volatility

No information available.

Saturation concentration

No information available.

Critical temperature

No information available.

Volatile organic compound

No information available.

# SECTION 10: Stability and reactivity

## 10.1. Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

10.2. Chemical stability

**Stability** Stable at normal ambient temperatures.

# 10.3. Possibility of hazardous reactions

Possibility of hazardous

Not determined.

reactions

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time. Moisture.

10.5. Incompatible materials

Materials to avoid Strong acids.

# 10.6. Hazardous decomposition products

Hazardous decomposition Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

products vapours. Oxides of the following substances: Carbon.

# SECTION 11: Toxicological information

# **SODIUM BICARBONATE**

# 11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD<sub>50</sub>) LD<sub>50</sub> > 4000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) No information available.

Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> 4.74

dust/mist mg/l)

Notes (inhalation LC<sub>50</sub>) LC<sub>50</sub> (4.5h) > 4.74 mg/l, 4.5 hours, Dust/Mist Rat

Skin corrosion/irritation

Animal data Rabbit Slightly irritating. OECD 404

Serious eye damage/irritation

Serious eye damage/irritation Rabbit Slightly irritating. OECD 405

Respiratory sensitisation

**Respiratory sensitisation** No information available.

Skin sensitisation

**Skin sensitisation** No information available.

Germ cell mutagenicity

**Genotoxicity - in vitro**This substance has no evidence of mutagenic properties.

Ames test: Negative with metabolic activation., Negative without metabolic activation.

Escherichia coli

Ames test: Negative with metabolic activation. Salmonella typhimurium

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

**Reproductive toxicity -** This substance has no evidence of toxicity to reproduction.

**development** Teratogenicity: - NOAEL: > 340 mg/kg, Oral, Rat

Teratogenicity: - NOAEL: > 330 mg/kg, Oral, Rabbit

Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** No information available.

Aspiration hazard

**Aspiration hazard** No information available.

**Inhalation** Dust in high concentrations may irritate the respiratory system.

**Ingestion** No harmful effects expected from quantities likely to be ingested by accident.

**Skin contact** Skin irritation should not occur when used as recommended.

**Eye contact** Particles in the eyes may cause irritation and smarting.

## SECTION 12: Ecological information

# **SODIUM BICARBONATE**

**Ecotoxicity** The product components are not classified as environmentally hazardous. However, large or

frequent spills may have hazardous effects on the environment.

12.1. Toxicity

**Toxicity** Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 7100 mg/l, Lepomis macrochirus (Bluegill)

Acute toxicity - aquatic

invertebrates

LOEC, 48 hours: 4100 mg/l, Daphnia magna

Chronic aquatic toxicity

Chronic toxicity - aquatic

NOEC, 21 day: > 576 mg/l, Daphnia magna

invertebrates OECD 211

# 12.2. Persistence and degradability

Persistence and degradability The product contains only inorganic substances which are not biodegradable.

## 12.3. Bioaccumulative potential

**Bioaccumulative potential** Substance is inorganic.

Partition coefficient No information available.

12.4. Mobility in soil

**Mobility** The product is soluble in water.

# 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

## 12.6. Other adverse effects

Other adverse effects Not determined.

## SECTION 13: Disposal considerations

# 13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Do not puncture or incinerate, even when

empty.

**Disposal methods**Dispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority.

# SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods

(IMDG, IATA, ADR/RID).

# 14.1. UN number

No information required.

# 14.2. UN proper shipping name

No information required.

## 14.3. Transport hazard class(es)

No information required.

# 14.4. Packing group

No information required.

## 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

# 14.6. Special precautions for user

No information required.

# 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to No information required.

Annex II of MARPOL 73/78

and the IBC Code

## SECTION 15: Regulatory information

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

**EU legislation** Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as

amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

# 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

#### Inventories

# **EU - EINECS/ELINCS**

All the ingredients are listed or exempt.

# Canada - DSL/NDSL

All the ingredients are listed or exempt. DSL

#### US - TSCA

All the ingredients are listed or exempt.

## Australia - AICS

All the ingredients are listed or exempt.

## Korea - KECI

All the ingredients are listed or exempt.

#### China - IECSC

All the ingredients are listed or exempt.

# Philippines – PICCS

All the ingredients are listed or exempt.

#### New Zealand - NZIOC

All the ingredients are listed or exempt.

## SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by

Road.

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

Inland Waterways.

CAS: Chemical Abstracts Service.

DNEL: Derived No Effect Level.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods.

Kow: Octanol-water partition coefficient.

LC₅o: Lethal Concentration to 50 % of a test population.

LD₅o: Lethal Dose to 50% of a test population (Median Lethal Dose).

PBT: Persistent, Bioaccumulative and Toxic substance.

PNEC: Predicted No Effect Concentration.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation

(EC) No 1907/2006.

RID: European Agreement concerning the International Carriage of Dangerous Goods by

Rail.

vPvB: Very Persistent and Very Bioaccumulative.

IARC: International Agency for Research on Cancer.

MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978.

cATpE: Converted Acute Toxicity Point Estimate.

BCF: Bioconcentration Factor.

BOD: Biochemical Oxygen Demand.

EC<sub>50</sub>: 50% of maximal Effective Concentration.

LOAEC: Lowest Observed Adverse Effect Concentration.

LOAEL: Lowest Observed Adverse Effect Level.

NOAEC: No Observed Adverse Effect Concentration.

NOAEL: No Observed Adverse Effect Level. NOEC: No Observed Effect Concentration.

LOEC: Lowest Observed Effect Concentration.

DMEL: Derived Minimal Effect Level.

EL50: Exposure Limit 50

hPa: Hectopascal

LL50: Lethal Loading fifty

OECD: Organisation for Economic Co-operation and Development

POW: Octanol-water partition coefficient SCBA: self-contained breathing apparatus

STP: Sewage Treatment Plant VOC: Volatile Organic Compounds

Classification abbreviations

Acute Tox. = Acute toxicity

and acronyms

Aguatic Acute = Hazardous to the aguatic environment (acute)

Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and

sources for data

Supplier's information.

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

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