Sigma-Aldrich

## SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

Version 6.3 Revision Date 07.06.2021 Print Date 21.09.2021 GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

1.1	Product identifiers Product name	:	Sodium bicarbonate
	Product Number Brand REACH No. CAS-No.	:	S6014 SIGALD 01-2119457606-32-XXXX 144-55-8

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

Identified uses : Laboratory chemicals, Manufacture of substances

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

	Company	:	Merck Life Science S.r.l. Via Monte Rosa 93 I-20149 MILANO
	Telephone Fax E-mail address	:	+39 02 3341 7340 +39 02 3801 0737 serviziotecnico@merckgroup.com
ŀ	Emergency telephone		
	Emergency Phone #	:	800-789-767 (CHEMTREC Italia) +39-02-4555-7031 (CHEMTREC chiamate

internazionali)

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

+39 02-6610-1029 (Centro Antiveleni

Niguarda Ca' Granda - Milano)

## 2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

#### 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.

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

#### 3.1 Substances

Formula	:	NaHCO3
Molecular weight	:	84,01 g/mol
CAS-No.	:	144-55-8
EC-No.	:	205-633-8

No components need to be disclosed according to the applicable regulations.

## **SECTION 4: First aid measures**

#### 4.1 Description of first-aid measures

#### If inhaled

After inhalation: fresh air.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

#### If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### **4.3 Indication of any immediate medical attention and special treatment needed** No data available

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** For this substance/mixture no limitations of extinguishing agents are given.

 5.2 Special hazards arising from the substance or mixture Nature of decomposition products not known. Not combustible. Ambient fire may liberate hazardous vapours.

## 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

## **5.4 Further information** Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire

extinguishing water from contaminating surface water or the ground water system.

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## **SECTION 6:** Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
- 6.2 Environmental precautions Do not let product enter drains.
- **6.3 Methods and materials for containment and cleaning up** Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
- **6.4 Reference to other sections** For disposal see section 13.

#### **SECTION 7: Handling and storage**

**7.1 Precautions for safe handling** For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions** Tightly closed. Dry.

**7.3** Specific end use(s) Apart from the uses mentioned in section 1.2 no other

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

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

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

## Personal protective equipment

## Eye/face protection

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

## **Skin protection**

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact

Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min

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Material tested: KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm

Break through time: 480 min Material tested:KCL 741 Dermatril® L

#### **Respiratory protection**

required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P1

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

#### **Control of environmental exposure**

Do not let product enter drains.

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

a)	Appearance	Form: crystalline Color: white
b)	Odor	odorless
c)	Odor Threshold	Not applicable
d)	рН	ca.8,6 at 50 g/l at 20 °C
e)	Melting point/freezing point	Melting point/range: 270 °C
f)	Initial boiling point and boiling range	Not applicable
g)	Flash point	Not applicable
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	The product is not flammable Flammability (solids)
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapor pressure	0,669 hPa at 20 °C - Regulation (EC) No. 440/2008, Annex, A.4
I)	Vapor density	No data available

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- m) Relative density 2,22 at 20 °C OECD Test Guideline 109
- n) Water solubility 93,4 g/l at 20 °C OECD Test Guideline 105
- o) Partition coefficient: Not applicable for inorganic substances n-octanol/water
- p) Autoignition No data available temperature
- q) Decomposition > 50 °C temperature
- r) Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: Not applicable
- s) Explosive properties No data available
- t) Oxidizing properties No data available

#### **9.2 Other safety information** No data available

## **SECTION 10: Stability and reactivity**

## **10.1 Reactivity**

No data available

#### **10.2** Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

## 10.3 Possibility of hazardous reactions

Violent reactions possible with: Alkali metals acids Generates dangerous gases or fumes in contact with: ammonium compounds

## **10.4** Conditions to avoid

Exposure to moisture. no information available

#### **10.5 Incompatible materials** No data available

#### **10.6 Hazardous decomposition products** In the event of fire: see section 5

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

Acute toxicity LD50 Oral - Rat - male and female - > 4.000 mg/kg (US-EPA) LC50 Inhalation - Rat - male and female - 4,5 h - > 4,74 mg/l (US-EPA) Dermal: No data available

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## Skin corrosion/irritation

Skin - Rabbit Result: slight irritation - 4 h (US-EPA)

## Serious eye damage/eye irritation

Eyes - Rabbit Result: slight irritation (US-EPA)

**Respiratory or skin sensitization** No data available

**Germ cell mutagenicity** No data available

**Carcinogenicity** No data available

**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

## **11.2 Additional Information**

RTECS: VZ0950000

Exposure to large amounts can cause:, Gastrointestinal disturbance, Heavy or prolonged skin exposure may result in the absorption of harmful amounts of material. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

However, when the product is handled appropriately, hazardous effects are unlikely to occur.

Handle in accordance with good industrial hygiene and safety practice.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

Toxicity to fish	flow-through test LC50 - Lepomis macrochirus - 7.100 mg/l - 96 h (US-EPA)
Toxicity to daphnia	flow-through test EC50 - Daphnia magna (Water flea) - 3.100 mg/l -
and other aquatic	48 h
invertebrates	(US-EPA)

## 12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

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## 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

No data available

## SECTION 13: Disposal considerations

## **13.1 Waste treatment methods**

## Product

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

#### **SECTION 14: Transport information** 14.1 UN number IMDG: -ADR/RID: -IATA: -14.2 UN proper shipping name ADR/RID: Not dangerous goods IMDG: Not dangerous goods Not dangerous goods IATA: 14.3 Transport hazard class(es) ADR/RID: -IMDG: -IATA: -14.4 Packaging group ADR/RID: -IMDG: -IATA: -14.5 Environmental hazards ADR/RID: no IMDG Marine pollutant: no IATA: no 14.6 Special precautions for user

## **Further information**

Not classified as dangerous in the meaning of transport regulations.

## **SECTION 15: Regulatory information**

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

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

## **15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

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## **SECTION 16: Other information**

## **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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