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A Geno Technology, Inc. (USA) brand name

Safety Data Sheet

Cat. # RC-092

Sodium Bicarbonate

Size: 1kg



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sodium bicarbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 12/11/2015

Revision date: 05/11/2017

Version: 7.1

SECTION 1: Identification

1.1. Identification

Product form : Substance
Substance name : sodium bicarbonate
Chemical name : Sodium Bicarbonate
CAS-No. : 144-55-8
Product code : 203S
Formula : NaHCO_3
Synonyms : ALKAKARB / B781 / baking soda / BICAR / bicarbonate of soda / C:Natron (= sodium bicarbonate) / carbonic acid monosodium salt / COL EVAC / colevac / DESSIKARB / JUSONIN / monosodium carbonate / NEUT / SODA BICARB / SODA MINT / sodium hydrogen carbonate / sodium hydrogencarbonate
BIG No : 10648

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Fire extinguishing medium
Food industry: auxiliary substance

1.3. Supplier

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9800 Page Avenue
Saint Louis, 63132-1429 - United States
T 800-628-7730 - F 314-991-1504
technical@GBiosciences.com - www.GBiosciences.com

1.4. Emergency telephone number

Emergency number : Chemtrec **1-800-424-9300** (USA/Canada), **+1-703-527-3887** (Intl)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
sodium bicarbonate (Main constituent)	ALKAKARB / B781 / baking soda / BICAR / bicarbonate of soda / C:Natron (= sodium bicarbonate) / carbonic acid monosodium salt / COL EVAC / colevac / DESSIKARB / JUSONIN / monosodium carbonate / NEUT / SODA BICARB / SODA MINT / sodium hydrogen carbonate / sodium hydrogencarbonate	(CAS-No.) 144-55-8	100	Not classified

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

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SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice.
First-aid measures after inhalation	: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
First-aid measures after skin contact	: Rinse with water. Soap may be used. Consult a doctor/medical service.
First-aid measures after eye contact	: Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to a doctor/medical service if irritation persists. Take victim to an ophthalmologist if irritation persists.
First-aid measures after ingestion	: Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Call Poison Information Centre (www.big.be/antigif.htm). Consult a doctor/medical service if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms	: Practically non-toxic if swallowed (LD50 oral 2000/5000 mg/kg). Slightly harmful in contact with skin. Practically non-toxic in contact with skin (LD50 skin > 2000 mg/kg). Slightly irritant to skin. Slightly irritant to respiratory organs. Slightly irritant to eyes.
Symptoms/effects after inhalation	: AFTER INHALATION OF DUST/MIST: Slight irritation. EXPOSURE TO HIGH CONCENTRATIONS: Coughing.
Symptoms/effects after skin contact	: Slight irritation.
Symptoms/effects after eye contact	: Slight irritation.
Symptoms/effects after ingestion	: AFTER INGESTION OF HIGH QUANTITIES: ON CONTINUOUS EXPOSURE/CONTACT: Vomiting. Abdominal pain. Diarrhoea. Dizziness. Change in the haemogramme/blood composition.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Nausea. Headache. Dizziness. Change in the haemogramme/blood composition. Affection of the renal tissue. Red skin. Tingling/irritation of the skin.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Adapt extinguishing media to the environment for surrounding fires.
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5.2. Specific hazards arising from the chemical

Fire hazard	: DIRECT FIRE HAZARD: Non combustible.
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5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire	: Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.
Firefighting instructions	: Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat.
Protection during firefighting	: Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Gloves. Protective clothing. Dust cloud production: compressed air/oxygen apparatus.
Emergency procedures	: Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes.
Measures in case of dust release	: In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray.
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Methods for cleaning up	: Stop dust cloud by humidifying with water. Scoop solid spill into closing containers. Wash down leftovers with plenty of water. Wash clothing and equipment after handling.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid raising dust. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Keep container tightly closed.
Hygiene measures	: Observe normal hygiene standards.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a well-ventilated place. Keep cool.
Heat-ignition	: KEEP SUBSTANCE AWAY FROM: heat sources.
Information on mixed storage	: KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. water/moisture.
Storage area	: Store in a dry area. Meet the legal requirements.
Special rules on packaging	: SPECIAL REQUIREMENTS: hermetical. watertight. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	: SUITABLE MATERIAL: stainless steel. nickel.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Materials for protective clothing:

GIVE GOOD RESISTANCE: butyl rubber. PVC

Hand protection:

Gloves

Eye protection:

Safety glasses. In case of dust production: protective goggles

Skin and body protection:

Protective clothing

Respiratory protection:

Dust production: dust mask with filter type P1

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline solid. Crystalline powder. Grains.
Color	: White
Odor	: Odourless
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable

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Freezing point	: Not applicable
Boiling point	: Not applicable
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: < 0.1 hPa (20 °C)
Relative vapor density at 20 °C	: Not applicable
Relative density	: 2.2
Specific gravity / density	: 2160 kg/m ³
Molecular mass	: 84.01 g/mol
Solubility	: Moderately soluble in water. Substance sinks in water. Water: 93.4 g/l (20 °C)
Log Pow	: -4.01 (Estimated value)
Auto-ignition temperature	: Not applicable
Decomposition temperature	: 165 °C (EU Method A.1: Melting/freezing point)
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

VOC content	: Not applicable (inorganic)
Other properties	: Hygroscopic. Basic reaction.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts violently with (some) acids.

10.2. Chemical stability

Hygroscopic.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Decomposes slowly in moist air and on exposure to temperature rise: release of harmful gases/vapours (carbon dioxide).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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LD50 oral rat	> 4000 mg/kg (FIFRA (40 CFR), Rat, Male / female, Experimental value, Oral)
LC50 inhalation rat (mg/l)	> 4.74 mg/l (Other, 4.5 h, Rat, Experimental value, Inhalation)
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

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Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Potential Adverse human health effects and symptoms	: Practically non-toxic if swallowed (LD50 oral 2000/5000 mg/kg). Slightly harmful in contact with skin. Practically non-toxic in contact with skin (LD50 skin > 2000 mg/kg). Slightly irritant to skin. Slightly irritant to respiratory organs. Slightly irritant to eyes.
Symptoms/effects after inhalation	: AFTER INHALATION OF DUST/MIST: Slight irritation. EXPOSURE TO HIGH CONCENTRATIONS: Coughing.
Symptoms/effects after skin contact	: Slight irritation.
Symptoms/effects after eye contact	: Slight irritation.
Symptoms/effects after ingestion	: AFTER INGESTION OF HIGH QUANTITIES: ON CONTINUOUS EXPOSURE/CONTACT: Vomiting. Abdominal pain. Diarrhoea. Dizziness. Change in the haemogramme/blood composition.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Nausea. Headache. Dizziness. Change in the haemogramme/blood composition. Affection of the renal tissue. Red skin. Tingling/irritation of the skin.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.
Ecology - air	: Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
Ecology - water	: Not harmful to crustacea. Not harmful to fishes. Harmful to bacteria.

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LC50 fish 1	7100 mg/l (EPA OPP 72-1, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, GLP)
EC50 Daphnia 1	4100 mg/l (EPA OPP 72-2, 48 h, Daphnia magna, Flow-through system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

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Persistence and degradability	Biodegradability: not applicable.
ThOD	Not applicable (inorganic)

12.3. Bioaccumulative potential

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Log Pow	-4.01 (Estimated value)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

sodium bicarbonate (144-55-8)

Ecology - soil	No (test)data on mobility of the substance available.
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12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Waste treatment methods.
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- Product/Packaging disposal recommendations : Do not discharge into the sewer. Do not discharge into surface water. Remove waste in accordance with local and/or national regulations. Recycle/reuse. Remove to an authorized dump. Precipitate/make insoluble. Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.
- Additional information : Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

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Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

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Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

National regulations

No additional information available

15.3. US State regulations

SECTION 16: Other information

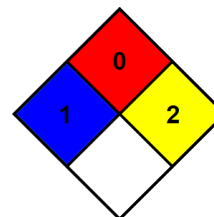
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NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 2 - Materials that readily undergo violent chemical change at elevated temperatures and pressures.



SDS US (GHS HazCom 2012)

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.