

MSDS

Sodium bicarbonate

Commission Regulation (EU) 2020/878 of 18 June 2020. In accordance with REACH Regulation 2020 No 1577

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

1.1. Product identification

Product name	Sodium bicarbonate
EU REACH registration number	01-2119457606-32-0062
CAS number	144-55-8
CE number	205-633-8
Synonyms	Sodium bicarbonate; baking powder; sodium bicarbonate

1.2. Identified relevant uses of the substance or mixture and uses advised against

Identified uses	Food materials, food additives, medical products, medical devices, cosmetics, flue gas treatment, mining and metallurgy, paper industry
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Uses not recommended	No uses that are not recommended have been identified.
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1.3. Supplier details

Supplier	SAISA CHEMICALS
Address	C. JUAN HURTADO DE MENDOZA 15, 1º POST 28036 MADRID (SPAIN)
Phone	+34 91345 94444
Email	saixa@saixa.es
Emergency phone	+34 9156 20420

SECTION 2: RISK IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (SI 2019 N° 720/EU 1272/2008)	
Physical risk	Not classified
Health risks	Not classified
Environmental risks	Not classified
Additional information	Classification (Regulation (CE) No. 1272/2008)

2.2. Label elements

CE number	205-633-8
Declaración de peligro	Not classified

2.3. Other risks

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

SECTION 3: Composition/ingredient information

3.1. Substance

Product Name	Sodium bicarbonate
CAS number	144-55-8
CE number	205-633-8
Chemical formula	Na ₂ CO ₃
Purity	> 99.5%

3.2. Mixtures

Description

NA

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Seek immediate medical attention. Show this safety data sheet to healthcare personnel.
Inhalation	Remove the affected person from the source of contamination. Take the affected person to fresh air and keep them warm and at rest in a position comfortable for breathing. Keep their airway open. Loosen tight clothing such as collars, ties, or belts. If breathing is difficult, properly trained personnel may administer oxygen. Place the unconscious person next to you in the recovery position and ensure breathing can occur.
Ingestion	Rinse the mouth thoroughly with water. Stop if the affected person feels unwell, as vomiting can be dangerous. Do not induce vomiting unless instructed to do so by medical personnel. If vomiting occurs, keep the head lowered to prevent vomit from entering the lungs. Never give anything by mouth to an unconscious person. Seek medical attention if any discomfort persists.
Contact with skin	Rinse immediately with plenty of water. Seek urgent medical attention if symptoms persist.
Eye contact	Rinse immediately with plenty of water. Remove contact lenses and keep eyelids wide open. Continue rinsing for at least 10 minutes.
First aid protection	First aid personnel must wear appropriate protective equipment during any rescue.

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

General information	See section 11 for additional information on health risks. The severity of the symptoms described will vary depending on the concentration and duration of exposure.
Inhalation	It can irritate the respiratory system.
Ingestion	In case of exposure to high concentrations: may cause stomach pain or vomiting.
Contact with skin	Prolonged contact may cause dry skin.
Eye contact	Eye irritation.

4.3. Indication of any medical attention and special treatments needed

Notes for the doctor	Symptomatic treatment
Specific treatment	Not required

SECTION 5: Extinguishing media

5.1. Extinguishing media

Suitable extinguishing agents

The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder, or water fog.

Inadequate means of extinguishing

Do not use pressurized water jets as a fire extinguisher; it can spread the fire.

5.2. Specific hazards arising from the substance or mixture+

Specific hazards

NC

Hazardous combustion products

Thermal decomposition or combustion of the products may include the following substances: harmful gases or vapors.

5.3. Recommendations for firefighters

Protective measures during firefighting

Avoid inhaling gases or fumes from the fire. Evacuate the area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done safely. Cool containers exposed to flames with water long after the fire has been extinguished. Control rainwater runoff by containing it and preventing it from reaching sewers and waterways. If there is a risk of water contamination, notify the appropriate authorities.

Special protective equipment for firefighters

Use a positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter gear will provide a basic level of protection for chemical incidents.

SECTION 6: Measures in case of accidental spillage

6.1. Personal precautions, protective equipment, and emergency procedures

Personal precautions

No action shall be taken without appropriate training or that involves personal risk. Keep unnecessary and unprotected personnel away from the spill. Wear protective clothing as described in Section 8 of this safety data sheet. Follow the safe handling precautions described in this safety data sheet. Wash thoroughly after a spill. Ensure that decontamination procedures and training are in place and that emergency disposal is available. Do not touch or trip over spilled material.

6.2. Environmental precautions

Environmental precautions

Avoid release into waterways. Major spills: report to the relevant authorities if environmental contamination occurs (sewerage, waterways, soil or air).

6.3. Concentration and cleaning methods and materials

Wear protective clothing as described in Section 8 of this safety data sheet. Clean up spills immediately and dispose of waste safely. Approach the spill upwind. Avoid generating and spreading dust. Small spills: Remove the spill with a vacuum cleaner or collect with a shovel and broom or similar and reuse if possible. Collect and place in suitable waste disposal containers and seal tightly. Containers with spilled material must be labeled specifying the contents and a warning symbol. Wash the contaminated area with plenty of water. Wash thoroughly after a spill. Neutralize with acid. Caution: May generate heat. After dissolution and neutralization, discharge into the sewer with plenty of water may be permitted. Check local water authority requirements.

6.4. Reference to other sections

Reference to other sections

For personal protection, see section 8. See section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for use

Read and follow the manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink, and animal feed. Keep the container tightly closed when not in use. Avoid handling that leads to dust formation. Do not handle the substance until you have read and understood all safety instructions. Do not handle damaged packages without protective equipment.

Occupational hygiene advice general:

Wash any contaminated skin immediately. Remove contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink, or smoke while wearing the garment. Wash at the end of each work shift and before eating, smoking, or using the restroom. Change work clothes daily before leaving your workplace.

7.2. Safe storage conditions, including possible incompatibilities

Storage precaution

Store in accordance with local regulations. Store away from the following materials: acids. Store only in the original container. Keep the container tightly closed in a cool, well-ventilated area. Keep containers upright. Protect containers from damage. Construct containment dikes at storage facilities to prevent soil and water contamination in case of a spill. The storage area floor must be impermeable, seamless, and non-absorbent.

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 are known for the ingredient(s).

8.2. Exposure controls

Exposure controls



Appropriate engineering controls:

Provide adequate ventilation. Personnel, work environment, and biological monitoring may be necessary to determine the effectiveness of ventilation or other control measures and/or the need for respiratory protection equipment. Use enclosed processes, local exhaust ventilation, or other engineering controls as the primary means of minimizing worker exposure. Personal protective equipment should only be used if worker exposure cannot be adequately controlled by engineering controls. Ensure that control

measures are regularly inspected and maintained. Ensure that operators are trained to minimize exposure.

Eye/face protection:

Eye protection that meets approved standards must be worn when a risk assessment indicates that eye contact is possible. Personal protective equipment for eye and face protection must comply with European Standard EN166. Wear well-fitting safety goggles or a face shield. If there is a risk of inhalation, a full-face respirator may be required.

Hand protection:

Chemical-resistant, impermeable gloves that meet approved standards must be worn if a risk assessment indicates that skin contact is possible. The most suitable type should be chosen in collaboration with the glove supplier/manufacture, who can provide information on the glove material's breakthrough time. To protect hands from chemicals, gloves must comply with European standard EN374. Taking into account the specific data provided by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection:

Appropriate footwear and additional protective clothing that meets approved standards must be worn if a risk assessment indicates that skin contamination is possible.

Hygiene measures

Provide an eyewash station and safety shower. Contaminated work clothes must not be dried at the work site. Wash contaminated clothing before reuse. Clean equipment and the work area daily. Good personal hygiene practices must be implemented. Wash at the end of each work shift and before eating, smoking, and using the restroom. Do not eat or smoke while using the equipment. Warn personnel about the hazardous properties of cleaning products.

Respiratory protection

Respiratory protection that meets an approved standard must be used if a risk assessment indicates that inhalation of contaminants is possible. Nuisance dust protection must be used when the airborne concentration exceeds 10 mg/m³. Use a suitable dust mask. Ensure all respiratory protective equipment is suitable for its intended use and bears the UKCA mark. Check that the respirator fits properly and that the filter is changed regularly. Combination and gas filter cartridges suitable for the intended use must be used. Full-face respirators with replaceable filter cartridges suitable for the intended use must be used. Half-mask and quarter-mask respirators with replaceable filter cartridges suitable for the intended use must be used.

Environmental exposure controls

Keep the container tightly closed when not in use.

SECTION 9: Physical and chemical properties

9.1. Basic information on physical and chemical properties

Appearance	Granules. Solid
Colour	White
Odour	Odourless
pH	pH (diluted solution): 8.4 (1%)
Boiling point	> 500°C
Boiling point and range	NA
Flash point	NA
Evaporation rate	NA
Flammability (solid, gas)	NA
Upper/lower limits of flammability or explosion	No information available
Vapor pressure	66,9 pa @ 20°C
Vapor density	NA

Relative density	2.21-2.23@ 20°C
Solubilities	93,4 g/l water @ 20°C
Partition coefficient	NA
Spontaneous ignition temperature	NA
Decomposition temperature	> 60°C
Viscosity	NA
Explosive properties	NA
Oxidizing properties	NA

9.2. Other information

Other information	NA
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There is no known reactivity hazard associated with this product.
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10.2. Chemical stability

Stability	Stable at normal room temperature and when used as recommended. Stable under prescribed storage conditions.
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10.3. Possibility of risk reactions

Possibility of risk reactions	No potentially dangerous reactions are known
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10.4. Conditions to avoid

Conditions to avoid	There is no knowledge of conditions that could lead to dangerous situations.
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10.5. Incompatible materials

Material to avoid	Strong acids. Strong oxidizing agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	It does not decompose when used and/or stored as recommended. Products of thermal decomposition or combustion may include the following substances: harmful gases or vapors.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicidad aguda-oral (LD ₅₀ mg/kg)	4.000.0
Species	Rat
Notes (oral LD ₅₀)	Based on the available ranking data, it meets the criterio
ETA oral (mg/kg)	4.000.0
Acute dermal toxicity	
Notes (dermal LD ₅₀)	Based on the available data, the classification criteria are not met.
Acute inhalation toxicity	
Notes (inhalation LC ₅₀)	Based on the available data, the classification criteria are not met.
Skin irritation	Based on the available data, the classification criteria are not met.
Serious eye irritation	It causes serious eye irritation problems.
Respiratory sensitivity	Based on the available data, the classification criteria are not met.
Respiratory sensitivity	Based on the available data, the classification criteria are not met.

Germ cell mutation

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

Carcinogenicity

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

Reproductive toxicity (fertility)

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

Reproductive toxicity (development)

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

Specific target organ toxicity –
single exposure

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

Specific target organ toxicity –
repeated exposure

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

Aspiration risk

It is not relevant

General information

No health risks are known. The dust may irritate the eyes and respiratory system. The severity of the symptoms described will depend greatly on the concentration and duration of exposure.

Inhalation

It can irritate the respiratory system

Ingestion

It may cause discomfort if swallowed. It may cause stomach pain and vomiting.

Contact with skin

Prolonged contact may cause dry skin

Eye contact

Irritation

Exposure route

No information available

No information available

11.2. Other risk information

SECTION 12: Ecological information

Ecotoxicity

It is not considered hazardous to the environment. However, large or frequent spills can have harmful effects on the environment.

12.1. Toxicity

Toxicity

Acute aquatic toxicity

Acute toxicity – fish

According to the available data, the classification criteria are not met.

NOEC, 96 hour: 5200 mg/l, *Lepomis macrochirus* (Bluegill)

LC₅₀, 96 hour: 7100 mg/l, *Lepomis macrochirus* (Bluegill)

Acute toxicity - aquatic

Invertebrates

NOEC, 48 hour: 3100 mg/l, *Daphnia magna*

EC₅₀, 48 hour: 4100 mg/l, *Daphnia magna*

12.2. Persistence and degradability

Persistence and degradability

The degradability of the product is unknown.

12.3. Bioaccumulative potential

Bioaccumulative potential

There is no data on bioaccumulation.

Partition coefficient

NA

12.4. Mobility on the ground

Mobility

Mobility on the ground

12.5. PBT and vPvB results

The product does not contain substances classified as PBT or vPvB.

12.6. Endocrine-disrupting properties

NA

12.7. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

Waste generation should be minimized or avoided whenever possible. Reuse or recycle products where possible. Dispose of product waste and containers with all possible precautions. Disposal of this product, its process solutions, waste, and by-products must always comply with local authority requirements.

Removal methods

Dispose of surplus products and those that cannot be recycled through a licensed disposal contractor. Packaging waste should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be discharged into the sewer system untreated unless it fully complies with local water authority requirements.

SECTION 14: Transportation information

General

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID)

14.1. UN number or ID number

NA

14.2. Incorrect shipping name

NA

14.3. Classes of hazardous transport

There are no transportation warning signs

14.4. Packaging group

NA

14.5. Environmental risks

Hazardous pollutant/marine pollutant

14.6. Special precautions for use

NA

14.7. Shipping in bulk according to IMO instruments

NA

SECTION 15: Regulatory information

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

National regulations

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EU) No 453/2010 of 20 May 2010. 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). Dangerous Preparations Directive 1999/45/EC. Dangerous Substances Directive 67/548/EEC.

Restrictions (SI 2020 No. 1577 Annex XVII)

There are no known specific restrictions for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used

STEL: Short Term Exposure Limits
TWA: Time Weighted Average
OSHA: Occupational safety and Health Administration
OEL: Occupational Exposure Limit
EC N°: The European Community number
CAS: Chemical Abstracts Service
ATE: Acute Toxicity Estimate
LC50: Lethal Concentration to 50 % of a test population.
LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).
PBT: Persistent, bioaccumulative and toxic substance
vPvB: very Persistent and very Bioaccumulative
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
IATA: International Air Transport Association
ICAO: Technical instructions for the safe transport of dangerous goods by air
IMDG: International Maritime Dangerous Goods

Key literature references and

sources for data

Source: European Chemicals Agency, <http://echa.europa.eu/>

Training advice

Read and follow manufacturer's recommendations. Only trained personnel should use this material.

Note to organizer

This SDS is prepared based on the information and documents received from product owner. CRAD or/and SDS author shall not be responsible for incorrect prepared of SDS and pecuniary loss or intangible damages because of deficient or wrong information and documents which comes from product owner.

The certificate information is used exclusively for this SDS. No changes can be made to this SDS without the knowledge and approval of the certificate holder or the certificate information can not be used for another SDS. Otherwise, the certificate will assume no responsibility for the owner SDS.