



Specification

Product Name: Bicarbonate Of Soda

Product Code: SPEC0005

Description:

Our Bicarbonate of Soda (Sodium Bicarbonate) is 100% extra fine pure powder and is aluminium free. Also known as "Baking Soda", it is primarily used in cooking and baking as a leavening agent. It reacts with acidic components in batters, releasing carbon dioxide, which in turn causes expansion of the batter forming the characteristic texture and grain in pancakes, cakes, quick breads and other baked and fried foods. Acidic compounds that induce this reaction include phosphates, cream of tartar, lemon juice, yoghurt, buttermilk, cocoa, vinegar, etc. Sodium Bicarbonate can be substituted for baking powder provided sufficient acid reagent is also added to the recipe. Most forms of baking powder contain Sodium Bicarbonate combined with one or more acidic phosphates.

Specifications:

Chemical Characteristics	Specifications	Typical Values
Sodium bicarbonate (NaHCO_3) in %	99.0 - 100.5	≥ 99.2
Sodium carbonate (Na_2CO_3) in %	≤ 1	< 0.50
Loss on drying (H_2O) in %	≤ 0.25	≤ 0.25
Ammonium (NH_4) in mg/kg	Odourless	Conform
Arsenic (As) in mg/kg	≤ 2	≤ 2
Lead (Pb) in mg/kg	≤ 2	≤ 2
Mercury (Hg) in mg/kg	≤ 1	≤ 1
Heavy metals in mg/kg	≤ 5	≤ 5

Chemical Characteristics in accordance with NF EN 898	Specifications	Typical Values
Iron (Fe) in mg/kg	≤ 5	≤ 3
Insoluble substances in mg/kg	< 200	Conform

Particle Size	Specifications	Typical Values
Cumulative fraction retained > 180 μm in %	≤ 15	5
Cumulative fraction retained > 45 μm in %	≥ 30	55
Diameter 50% in μm	-	55
Bulk density	≥ 0.8	0.98

**Ingredients:**

Bicarbonate of Soda (E500)

Dietary Information:

Aluminium Free, Suitable for Vegans & Vegetarians, Non-GMO, Gluten Free.

Nutritional Information:

Based on typical content/100g: Energy: 0kj/0kcal, Fat: 0g, Carbohydrates: 0g, Protein: 0g, Salt: 0g.

Storage:

Store in dry, cool conditions and not in direct sunlight. (Risk of caking if long-term storage).

Packaging:

Size	EAN
250g	5060341113055
500g	5060341113062
1kg	5060341113079
5kg	5056191004841
10kg	5056191004858

Shelf Life:

48 months from production date.

Allergen Declaration

Allergen	Contains (Y/N)
Cereals containing Gluten	N
Crustaceans	N
Eggs	N
Fish	N
Peanuts	N
Soybeans	N
Milk	N
Nuts	N
Celery	N
Mustard	N
Sesame Seeds	N
Sulphur Dioxide and Sulphites (at concentration of more than 10mg/kg or 10mg/L in terms of Sulphur Dioxide)	N
Lupin	N
Molluscs	N



Material Safety Data Sheet

1: Substance/Preparation and Company Identification:

1.1 – Product Identifier

Product Form: Substance

Product Name: Bicarbonate of Soda

EC-No. : 205-633-8

CAS-No. : 144-55-8

REACH registration No. (SDS) : 01-2119457606-32-0011

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

Use of the substance/mixture:

Glassmaking, metallurgy, stationery, tannery, chemical industries, pH corrector.

Fumes treatment.

Detergency.

Human or animal nutrition.

Hemodialysis, excipients in the pharmaceutical field, cosmetics.

Depending on grade.

1.3 – Suppliers Details

Special Ingredients Ltd, 4 Foxwood View, Chesterfield, S41 9RN. Tel: 0044 (0)1246 906247.

E-mail address: <https://specialingredients.co.uk/pages/contact>.

Emergency Telephone Contact: 07701 095864.

2: Hazard Identification:

2.1 – Classification of the substance or mixture

Classification according to the United Nations GHS: Not classified

2.2 – Label elements

Labelling according to the United Nations GHS: No labelling applicable

2.3 – Other hazards

Other hazards not contributing to the classification: None known

Adverse physicochemical, human health and environmental effects: To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice

3: Composition and Information on Ingredients:

3.1 – Substances

Substance identification codes: See section 1.1

Name	Product Identifier	%	Classification according to the United Nations GHS
Sodium hydrogencarbonate (Main constituent)	(CAS-No.) 144-55-8	100	Not classified

3.2 – Mixtures

Not applicable

www.specialingredients.co.uk

4: First Aid Measures:

4.1 – Description of first aid measures

First-aid measures general: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

First-aid measures after inhalation: Move the affected person away from the contaminated area and into the fresh air. If irritation persists, consult a doctor.

First-aid measures after skin contact: Wash with soapy water.

First-aid measure after eye contact: Immediately rinse with water for a prolonged period while holding the eyelids wide open. If irritation persists, consult an eye specialist.

First-aid measures after ingestion: Get medical advice/attention. If possible show this sheet, if not available show packaging or label.

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

No additional information available

4.3 – Indication of any immediate medical attention and special treatment needed

No additional information available

5: Firefighting Measures:

5.1 – Extinguishing media

Suitable extinguishing media: All extinguishing agents can be used.

5.2 – Special hazards arising from the substance or mixture

Fire hazard: Not combustible.

Reactivity: To our knowledge, the product does not present any particular risk, under normal conditions of use.

5.3 – Advice for firefighters

Firefighting instructions: Contain the extinguishing fluids by bunding.

Protection during firefighting: Do not attempt to take action without suitable protective equipment.

Self-contained breathing apparatus. Complete protective clothing.

6: Accidental Release Measures:

6.1 – Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Avoid contact with skin and eyes. Do not breathe dust.

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".

6.2 – Environmental precautions

Contain the spilled material by bunding. Do not discharge into drains or rivers.

6.3 – Methods and material for containment and cleaning up

For containment: Sweep up or vacuum up the product.

Methods for cleaning up: Wash contaminated area with large amounts of water.

Other information: Dispose of contaminated materials in accordance with current regulations.

7: Handling And Storage:

7.1 – Precautions for safe handling

Precautions for safe handling: Avoid contact with skin and eyes. Avoid creating or spreading dust. Extraction to remove dust at its source.

Hygiene measures: Do not drink, eat or smoke in the workplace. Always wash hands after handling the product.

7.2 – Conditions for safe storage, including any incompatibilities

Technical measures: Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

Storage conditions: Store in original container. Store in a dry area.

Incompatible products: Acids.

8: Exposure Controls/ Personal Protection:

8.1 – Control parameters

No additional information available

8.2 – Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.3 – Individual protection measures, such as personal protective equipment (PPE)

Hand protection: Chemically resistant protective gloves

Eye protection: Safety glasses (EN 166)

Skin and body protection: Protective clothing

Respiratory protection: If the ventilation is suitable, it is not essential to wear respiratory equipment.

In case of insufficient ventilation, wear suitable respiratory equipment (EN 149). Dust mask FFP1

8.4 – Exposure limit values for the other components

No additional information available

9: Physical and Chemical Properties:

9.1 – Information on basic physical and chemical properties

Physical state: Solid

Appearance: Powder.

Colour: white.

Odour: odourless.

Odour threshold: No data available

pH: 8

pH solution: 50 g/l

Relative evaporation rate (butylacetate=1): No data available

Relative evaporation rate (ether=1): No data available

Melting point: 270 °C

Freezing point: No data available

Boiling point: No data available

Flash point: Not applicable

Auto-ignition temperature: No data available
Decomposition temperature: ≥ 50 °C
Flammability (solid, gas): Non flammable
Vapour pressure: No data available
Vapour pressure at 50 °C: No data available
Relative vapour density at 20 °C: No data available
Relative density: 2.21 - 2.23 (20 °C)
Relative density of saturated gas/air mixture: No data available
Density: No data available
Relative gas density: No data available
Solubility: soluble in water.
- Water: 93.4 g/l (20 °C) (pH = 8.4)
- Organic solvent: Insoluble
Log Pow: No data available
Log Kow: No data available
Viscosity, kinematic: Not applicable
Viscosity, dynamic: Not applicable
Viscosity, kinematic (calculated value) (40 °C): No data available
Explosive properties: Not explosive.
Oxidising properties: Non oxidizing material according to EC criteria.
Explosive limits: No data available
Lower explosive limit (LEL): No data available
Upper explosive limit (UEL): No data available

9.2 – Other information

Other properties: Tends to cake (solidify) on heating or under humid conditions.

10: Stability and Reactivity:

10.1 – Reactivity

To our knowledge, the product does not present any particular risk, under normal conditions of use.

10.2 – Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3 – Possibility of hazardous reactions

None to our knowledge.

10.4 – Conditions to avoid

Moisture. High temperature.

10.5 – Incompatible materials

Fluorine. Acids.

10.6 – Hazardous decomposition products

Carbon dioxide.

11: Toxicological Information:

11.1 – Hazardous decomposition products

Acute toxicity (oral): Not classified (Based on available data, the classification criteria are not met)

Acute toxicity (dermal): Not classified (Based on available data, the classification criteria are not met)



Acute toxicity (inhalation): Not classified (Based on available data, the classification criteria are not met)

Sodium hydrogencarbonate (144-55-8)

LD50 oral rat	> 4000 mg/kg (EPA-FIFRA 40 CFR 160)
LC50 inhalation rat	> 4.74 mg/l/4h (EPA OTS 798.1150)

Skin corrosion/irritation: Not classified ((OECD 404 method)), pH: 8

Serious eye damage/irritation: Not classified ((OECD 405 method)), pH: 8

Respiratory or skin sensitisation: Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity: Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity: Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity: Not classified (Based on available data, the classification criteria are not met)

NOAEL (oral, rat): 340 mg/kg/j

STOT-single exposure: Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure: Not classified (Based on available data, the classification criteria are not met)

Sodium hydrogencarbonate (144-55-8)

NOAEL (oral, rat, 90 days)	596 mg/kg bodyweight/day Developmental toxicity
----------------------------	---

Aspiration hazard: Not classified (Not applicable)

12: Ecological Considerations:**12.1 – Toxicity**

Acute aquatic toxicity: Not classified

Chronic aquatic toxicity: Not classified

Sodium hydrogencarbonate (144-55-8)

LC50 fish	7100 mg/l/96h (Lepomis macrochirus)
EC50 Daphnia	4100 mg/l/48h (Daphnia magna)
NOEC (chronic)	> 576 mg/l/ 21 d (Daphnia magna)

12.2 – Persistence and degradability**Sodium hydrogencarbonate (144-55-8)**

Persistence and degradability	Not applicable.
-------------------------------	-----------------

12.3 – Bioaccumulative potential**Sodium hydrogencarbonate (144-55-8)**

Bioaccumulative potential	No additional information available
---------------------------	-------------------------------------

12.4 – Mobility in soil**Sodium hydrogencarbonate (144-55-8)**

Mobility in soil	No additional information available
------------------	-------------------------------------

12.5 – Other adverse effects

Ozone: Not classified

Other adverse effects: No additional information available.

13: Disposal considerations:**13.1 – Disposal methods**

www.specialingredients.co.uk



Waste treatment methods: Dispose of in accordance with relevant local regulations. Incinerate at a licensed installation.

14: Transport Information:

In accordance with IMDG / IATA / UN RTDGLAND TRANSPORT:

UN RTDG	IMDG	IATA
14.1 – UN number		
Not applicable	Not applicable	Not applicable
14.2 – Proper Shipping Name		
Not applicable	Not applicable	Not applicable
14.3 – Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
14.4 – Packing group		
Not applicable	Not applicable	Not applicable
14.5 – Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available		

14.6 – Special precautions for user

- UN RTDG

Transport regulations (UN): Not subject

- IMDG

Transport regulations (IMDG): Not subject

- IATA

Transport regulations (IATA): Not subject

14.7 – Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

15: Regulatory Information:

15.1 – Safety, health and environmental national regulations specific for the product

Regional legislation: Listed on the United States TSCA (Toxic Substances Control Act) inventory. Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances). Listed on the Canadian DSL (Domestic Substances List). Listed on the AICS (Australian Inventory of Chemical Substances). Listed on the Korean ECL (Existing Chemicals List). Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China). Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory.

16: Other Information:

The information contained in this data sheet is, to the best of our knowledge, true and accurate, but any recommendations or suggestions which may be made are without guarantee, since the conditions of use are beyond our control. We do not accept any liability whatsoever, however arising, which results directly or indirectly from the use of the product.