



Sodium Bicarbonate

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Revision date: 31/07/2015 Date of issue: 31/07/2015 Supersedes date: 09/06/2012

Version: 1.0

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

1.1. Product identifier

Product form : Substance
Substance name : Sodium Bicarbonate
EC no : 205-633-8
CAS No : 144-55-8
REACH registration No : 01-2119457606-32
Formula : NaHCO_3
Synonyms : Sodium hydrogen carbonate, Baking Soda

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial. For professional use only.
Use of the substance/mixture : Food Ingredient, Pharmaceutical, Household and Personal Care Product, Water Treatment, General Industrial Use.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Company

Church & Dwight
500 Charles Ewing Blvd
Ewing Township, NJ 08628
T 1-800-524-1328
www.churchdwight.com

1.4. Emergency telephone number

Emergency number : For Medical Emergency: 1-888-234-1828, For Chemical Emergency: 1-800-424-9300
(CHEMTREC)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

Other hazards not contributing to the classification : Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.
Prolonged contact with dust can produce mechanical irritation.

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : Sodium Bicarbonate
CAS No : 144-55-8
EC no : 205-633-8

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium bicarbonate	(CAS No) 144-55-8 (EC no) 205-633-8	100	Not classified

Full text of H-phrases: see section 16

3.2. Mixture

Sodium Bicarbonate

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.
- First-aid measures after inhalation : When symptoms occur: go into open air and ventilate suspected area.
- First-aid measures after skin contact : Brush off loose particles from skin. Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.
- First-aid measures after eye contact : Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Obtain medical attention if irritation persists.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Seek medical attention if a large amount is swallowed.

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

- Symptoms/injuries : None expected under normal conditions of use.
- Symptoms/injuries after inhalation : Prolonged inhalation of dust may cause respiratory irritation.
- Symptoms/injuries after skin contact : Skin contact with large amounts of dust may cause mechanical irritation.
- Symptoms/injuries after eye contact : Contact may cause irritation due to mechanical abrasion.
- Symptoms/injuries after ingestion : Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema.
- Chronic symptoms : None expected under normal conditions of use.

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

If exposed or concerned, get medical advice and attention.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : For surrounding fire. Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable. Under fire conditions, hazardous fumes will be present.
- Explosion hazard : Product is not explosive.
- Reactivity : Hazardous reactions will not occur under normal conditions.
- Hazardous decomposition products in case of fire : Carbon oxides (CO, CO₂). Sodium oxides.

5.3. Advice for firefighters

- Precautionary measures fire : Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.
- Firefighting instructions : Exercise caution when fighting any chemical fire.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
- Other information : Refer to Section 9 for flammability properties.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust or fumes. Avoid skin and eye contact.

6.1.1. For non-emergency personnel

- Protective equipment : Use appropriate personal protection equipment (PPE).
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Contain and collect as any solid.

Sodium Bicarbonate

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Methods for cleaning up : Clean up spills immediately and dispose of waste safely. Avoid generation of dust during clean-up of spills. Keep in suitable, closed containers for disposal. Contact competent authorities after a spill.

6.4. Reference to other sections

See heading 8, Exposure Controls and Personal Protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : When heated, material emits irritating fumes.
Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

Incompatible products : Acids. Water. Lime.

Storage temperature : < 65 °C (< 150 °F)

7.3. Specific end use(s)

Food Ingredient, Pharmaceutical, Household and Personal Care Product, Water Treatment, General Industrial Use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium bicarbonate (144-55-8)		
Latvia	OEL TWA (mg/m ³)	5 mg/m ³
Czech Republic	Expoziční limity (PEL) (mg/m ³)	5 mg/m ³
Particulates not otherwise regulated (PNOR) (RR-00072-6)		
Belgium	Limit value (mg/m ³)	3 mg/m ³ (alveolar fraction) 10 mg/m ³ (inhalable fraction)
USA ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³ Respirable fraction 10 mg/m ³ Total Dust
Spain	VLA-ED (mg/m ³)	10 mg/m ³ (recommended limit, this value is for the particulate matter that is free from Asbestos and contains less than 1% of Crystalline silica; no toxicological data to support TWA. Do not exceed generic limit value provided-inhalable fraction) 3 mg/m ³ (recommended limit, this value is for the particulate matter that is free from Asbestos and contains less than 1% of Crystalline silica; no toxicological data to support TWA. Do not exceed generic limit value provided-respirable fraction)
Ireland	OEL (8 hours ref) (mg/m ³)	10 mg/m ³ (total inhalable) 4 mg/m ³ (respirable)
Ireland	OEL (15 min ref) (mg/m ³)	30 mg/m ³ (calculated-total inhalable) 12 mg/m ³ (calculated-respirable)
Norway	Gjennomsnittsverdier (AN) (mg/m ³)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
Norway	Gjennomsnittsverdier (Korttidsverdi) (mg/m ³)	20 mg/m ³ (total dust) 10 mg/m ³ (respirable dust)
Portugal	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable fraction, particulate matter containing no Asbestos and < 1% Crystalline silica) 3 mg/m ³ (respirable fraction, particulate matter containing no Asbestos and < 1% Crystalline silica)

8.2. Exposure controls

Appropriate engineering controls : For occupational/workplace settings: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Sodium Bicarbonate

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Personal protective equipment : For occupational or bulk quantities: Gloves. Safety glasses. Dust formation: dust mask.



Materials for protective clothing : For occupational/workplace settings: Chemically resistant materials and fabrics.
Hand protection : For occupational/workplace settings: Wear chemically resistant protective gloves.
Eye protection : For occupational/workplace settings: Chemical goggles or safety glasses.
Respiratory protection : Use an approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.
Other information : When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Colour : White, crystalline powder
Odour : None
Odour threshold : No data available
pH : 8,2 (1% Solution)
Evaporation rate : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Density : 62 lb/ft³
Solubility : 8,6 g/100ml @ 20 °C (68 °F) in water
Partition coefficient: n-octanol/water : No data available
Viscosity : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : Not applicable

9.2. Other information

VOC content : Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

10.2. Chemical stability

Decomposes slowly on exposure to water (moisture).

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Exposure to moisture or moist air. Avoid temperatures above 65 °C (150°F).

10.5. Incompatible materials

Acids. Water. Lime.

10.6. Hazardous decomposition products

None known. At high temperature may liberate toxic gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Sodium Bicarbonate

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Sodium Bicarbonate (144-55-8)	
LD50 oral rat	7,3 g/kg
LC50 inhalation rat (mg/l)	> 4,7 mg/l/4h
Sodium bicarbonate (144-55-8)	
LD50 oral rat	4220 mg/kg
Skin corrosion/irritation	: Not classified pH: 8,2 (1% Solution)
Serious eye damage/irritation	: Not classified pH: 8,2 (1% Solution)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Sodium Bicarbonate (144-55-8)	
LC50 fish 1	7100 mg/l Bluegill
EC50 Daphnia 1	4100 mg/l
LC50 fish 2	7700 mg/l Rainbow Trout
Sodium bicarbonate (144-55-8)	
LC50 fish 1	8250 - 9000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	2350 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and degradability

Sodium Bicarbonate (144-55-8)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Sodium Bicarbonate (144-55-8)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

Sodium Bicarbonate

Safety Data Sheet

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14.4. Packing group

Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Sodium Bicarbonate is not on the REACH Candidate List

Contains no substance on the REACH candidate list

Sodium Bicarbonate is not on the REACH Annex XIV List

Contains no REACH Annex XIV substances

VOC content : < 1 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Revision date : 31/07/2015

Data sources : According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Church&Dwight EU GHS SDS

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