



Sodium Bicarbonate

SDS Preparation Date (mm/dd/yyyy): 05/31/2024

Page 1 of 9

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: **Sodium Bicarbonate**

Other means of identification : Baking soda, Bicarbonate of soda

Recommended use of the chemical and restrictions on use

: Used in coatings, ink, plastic, rubber, leather products and other unidentified uses
Recommended restrictions: Technical grade, not for human consumption.

Chemical family

: Pure substance with impurities

Name, address, and telephone number
of the supplier:

Carbonfree Chemicals

11503 Bulverde Rd
San Antonio, TX, USA
78217

Supplier's Telephone #

: (210) 476 5906

24 Hr. Emergency Tel #

: Chemtrec 1-800-424-9300 (Within Continental U.S.); Chemtrec 703-527-3887
(Outside U.S.).

Name, address, and telephone number of
the manufacturer:

Refer to supplier

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

White powder. Odorless.

This material is not classified as hazardous under U.S. OSHA regulations (29 CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Label elements

Hazard pictogram(s)

None required under U.S. OSHA Hazcom 2012 and Canadian WHMIS 2015 regulations.

Signal Word

Not required

Hazard statement(s)

Not applicable.

Precautionary statement(s)

Not applicable.

Other hazards

Other hazards which do not result in classification:

Contact with eyes may cause irritation. Inhalation of dusts may cause respiratory irritation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical name</u>	<u>Common name and synonyms</u>	<u>CAS #</u>	<u>Concentration (% by weight)</u>
Sodium bicarbonate	NaHCO ₃	144-55-8	>98%



Sodium Bicarbonate

SDS Preparation Date (mm/dd/yyyy): 05/31/2024

Page 2 of 9

SAFETY DATA SHEET

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

- Ingestion* : Do not induce vomiting. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical attention if symptoms persist.
- Inhalation* : Immediately remove person to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Call a POISON CENTER or doctor/physician if you feel unwell.
- Skin contact* : Wash affected areas with soap and water. Take off contaminated clothing and wash before re-use. Get medical attention if irritation develops and persists.
- Eye contact* : Flush with large amounts of water for 15 minutes. Remove contact lenses, if present and easy to do. If irritation or symptoms develop, seek medical attention.

Most important symptoms and effects, both acute and delayed

- : Direct eye contact may cause temporary redness. Inhalation of dusts may cause respiratory irritation.

Indication of any immediate medical attention and special treatment needed

- : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

- : Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.

Unsuitable extinguishing media

- : Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture / Conditions of flammability

- : Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Flammability classification (OSHA 29 CFR 1910.106)

- : Not flammable.

Hazardous combustion products

- : Sodium oxides. Carbon dioxide and carbon monoxide.

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. A full-body chemical resistant suit should be worn. Do not enter without wearing specialized protective equipment suitable for the situation. Firefighter's normal protective clothing (Bunker Gear) will not provide adequate protection. A full-body encapsulating chemical protective suit with positive pressure self-contained breathing apparatus (NIOSH approved or equivalent) may be necessary.

Special fire-fighting procedures

- : Evacuate personnel to safe areas. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. Dike for water control. Avoid release to the environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- : All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Keep all other personnel upwind and away from the spill/release. Restrict access to area until completion of clean-up. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.



Sodium Bicarbonate

SDS Preparation Date (mm/dd/yyyy): 05/31/2024

Page 3 of 9

SAFETY DATA SHEET

Environmental precautions : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. For large spills, dike the area to prevent spreading.

Methods and material for containment and cleaning up

: Prevent further leakage or spillage if safe to do so. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Contact the proper local authorities.

Special spill response procedures

: In Canada: For 24-hour emergency assistance, call: 1-613-996-6666 (CANUTEC).
 US CERCLA Reportable quantity (RQ): None reportable.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

: Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation.

Conditions for safe storage : Store in a cool, dry, well-ventilated area. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. No smoking in the area. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

Incompatible materials : Acids; Ammonium compounds

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Exposure Limits:</u>					
	<u>Chemical Name</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
		<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Sodium bicarbonate	N/Av	N/Av	N/Av	N/Av	

Exposure controls

Ventilation and engineering measures

: Provide exhaust ventilation or other engineering controls to keep the airborne concentration of vapours below their respective threshold limit value.

Respiratory protection : None required under normal conditions. Seek advice from respiratory protection specialists.

Skin protection : Wear protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye / face protection : Chemical goggles must be worn to prevent dusts from entering the eyes.

Other protective equipment : An eyewash station and safety shower should be made available in the immediate working area. Other equipment may be required depending on workplace standards.

General hygiene considerations

: Observe good industrial hygiene practices. Avoid breathing dust and fume.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State : Solid -Powder

Colour : White.

Odour : Odorless.

Odour threshold : No information available.

pH : 8.3

Melting Point/Freezing point : Decomposes.



Sodium Bicarbonate

SDS Preparation Date (mm/dd/yyyy): 05/31/2024

Page 4 of 9

SAFETY DATA SHEET

Initial boiling point and boiling range

: Not applicable.

Flash point : Not applicable.

Flashpoint (Method) : Not applicable.

Evaporation rate (BuAe = 1) : No information available.

Flammability : The product is not flammable.

Lower explosion or flammability limit (% by vol.)

: N/Ap

Upper explosion or flammability limit (% by vol.)

: N/Ap

Oxidizing properties : None known.

Explosive properties : Not explosive

Vapour pressure : No information available.

Relative vapour density : No information available.

Relative density / Specific gravity

: 2.16(water = 1)

Solubility in water : Soluble

Other solubility(ies) : No information available.

Partition coefficient: n-octanol/water or Coefficient of water/oil distribution

: Not applicable.

Auto-ignition temperature : No information available.

Decomposition temperature : >50°C

Viscosity : Not applicable.

Particle characteristics : Not available

Volatiles (% by weight) : No information available.

Volatile organic Compounds (VOC's)

: No information available.

Absolute pressure of container

: N/Ap

Flame projection length : N/Ap

Other physical/chemical comments

: None known or reported by the manufacturer.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not normally reactive.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions

: Hazardous polymerization does not occur.

Conditions to avoid : Avoid contact with incompatible materials. Avoid dust formation.

Incompatible materials : Strong oxidizing agents; Strong acids; Strong alkalis.

Hazardous decomposition products

: None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : YES

Routes of entry skin & eye : YES



Sodium Bicarbonate

SDS Preparation Date (mm/dd/yyyy): 05/31/2024

SAFETY DATA SHEET

Routes of entry Ingestion : YES

Routes of exposure skin absorption
 : NO

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

: Inhalation of dusts may cause respiratory irritation.

Sign and symptoms ingestion

: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Sign and symptoms skin

: May cause mild skin irritation on prolonged contact.

Sign and symptoms eyes

: Direct eye contact may cause slight redness.

Potential Chronic Health Effects

: Prolonged exposure can cause redness, swelling, itching, cracking of the skin, dermatitis and sensitization.

Mutagenicity

: Not expected to be mutagenic in humans.

Carcinogenicity

: No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects & Teratogenicity

: Not expected to have other reproductive effects.

Sensitization to material

: Not expected to be a skin or respiratory sensitizer.

Specific target organ effects

: This material is not classified as hazardous under U.S. OSHA regulations (29 CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Medical conditions aggravated by overexposure

: Pre-existing skin, eye and respiratory disorders.

Synergistic materials

: No information available.

Toxicological data

: See below for toxicological data on the substance.

<u>Chemical name</u>	<u>LC₅₀(4hr)</u> <u>inh, rat</u>	<u>LD₅₀</u>	
		<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Sodium bicarbonate	>4.74 mg/L	4220 mg/kg	N/Av

Other important toxicological hazards

: None known or reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

:

See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

<u>Ingredients</u>	<u>CAS #</u>	<u>Toxicity to Fish</u>		
		<u>LC50 / 96h</u>	<u>NOEC / 21 day</u>	<u>M Factor</u>
Sodium bicarbonate	144-55-8	7100 mg/L (Lepomis macrochirus)	N/Av	None.



Sodium Bicarbonate

SDS Preparation Date (mm/dd/yyyy): 05/31/2024

SAFETY DATA SHEET

<u>Ingredients</u>	CAS #	<u>Toxicity to Daphnia</u>		
		<u>EC50 / 48h</u>	<u>NOEC / 21 day</u>	<u>M Factor</u>
Sodium bicarbonate	144-55-8	4100 mg/L (Daphnia magna)	>576 mg/L (Daphnia magna)	None.

<u>Ingredients</u>	CAS #	<u>Toxicity to Algae</u>		
		<u>EC50 / 96h or 72h</u>	<u>NOEC / 96h or 72h</u>	<u>M Factor</u>
Sodium bicarbonate	144-55-8	N/Av	N/Av	None.

Persistence and degradability

: Biodegradation is not applicable to inorganic substances.

Bioaccumulation potential

: No data is available on the product itself.

<u>Components</u>	<u>Partition coefficient n-octanol/water (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
Sodium bicarbonate (CAS 144-55-8)	N/Av	N/Av

Mobility in soil

: High water solubility indicates a high mobility in soil.

Other Adverse Environmental effects

: No data is available on the product itself.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal

: Handle waste according to recommendations in Section 7. Empty containers may contain hazardous residues.

Methods of Disposal

: Dispose in accordance with all applicable federal, state, provincial and local regulations.

RCRA

: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method.



Sodium Bicarbonate

SDS Preparation Date (mm/dd/yyyy): 05/31/2024

SAFETY DATA SHEET

SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	None.	Not regulated.	not regulated	none	
49CFR/DOT Additional information	None.				
IMDG	None.	Not regulated.	not regulated	none	
IMDG Additional information	None.				
ICAO/IATA	None.	Not regulated.	not regulated	none	
ICAO/IATA Additional information	None.				

Special precautions for user : Appropriate advice on safety must accompany the package.

Environmental hazards : This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See Section 12 for more environmental information.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:

<u>Ingredients</u>	CAS #	TSCA Inventory	CERCLA Reportable Quantity(RQ) (40 CFR 117.302):	SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical	
					Toxic Chemical	de Minimis Concentration
Sodium bicarbonate	144-55-8	Yes	N/Ap	N/Av	No	N/Ap

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: None.

US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

<u>Ingredients</u>	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Sodium bicarbonate	144-55-8	No	N/Ap	No	No	No	No	No	No



Sodium Bicarbonate

SDS Preparation Date (mm/dd/yyyy): 05/31/2024

Page 8 of 9

SAFETY DATA SHEET

Canadian Information:

All ingredients are present on the DSL.

International Information:

Components listed below are present on the following International Inventory list:

<u>Ingredients</u>	<u>CAS #</u>	<u>European EINECs</u>	<u>Australia AICS</u>	<u>Philippines PICCS</u>	<u>Japan ENCS</u>	<u>Korea KECI/KECL</u>	<u>China IECSC</u>	<u>NewZealand IOC</u>
Sodium bicarbonate	144-55-8	205-633-8	Present	Present	(1)-310; (1)-164	KE-31360	Present	No data available.

SECTION 16. OTHER INFORMATION

Legend

- : ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CNS: Central Nervous System
- COC: Cleveland Open Cup
- CSA: Canadian Standards Association
- DOT: Department of Transportation
- EPA: Environmental Protection Agency
- IARC: International Agency for Research on Cancer
- LC: Lethal Concentration
- LD: Lethal Dose
- N/Ap: Not Applicable
- N/Av: Not Available
- NIOSH: National Institute of Occupational Safety and Health
- NTP: National Toxicology Program
- OSHA: Occupational Safety and Health Administration
- PEL: Permissible exposure limit
- SARA: Superfund Amendments and Reauthorization Act
- STEL: Short Term Exposure Limit
- TLV: Threshold Limit Values
- TWA: Time Weighted Average

References

- : 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices
- 2. ECHA - European Chemical Agency
- 3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases
- 4. Safety Data Sheets from manufacturer.
- 5. US EPA Title III List of Lists
- 6. California Proposition 65 List
- 7. OECD - The Global Portal to Information on Chemical Substances - eChemPortal

Preparation Date (mm/dd/yyyy)

: 05/31/2024

Other special considerations for handling

: Provide adequate information, instruction and training for operators.



Carbonfree Chemicals
11503 Bulverde Rd
San Antonio, TX, USA, 78217
Telephone: (210) 476 5906

Sodium Bicarbonate

SDS Preparation Date (mm/dd/yyyy): 05/31/2024

Page 9 of 9

SAFETY DATA SHEET

<p>Prepared for: Carbonfree Chemicals 11503 Bulverde Rd San Antonio, TX 78217 Telephone: (210) 476 5906 info@carbonfreechem.com</p>	
<p>Prepared by: ICC The Compliance Center Inc. Telephone: (888) 442-9628 (U.S.): (888) 977-4834 (Canada) http://www.thecompliancecenter.com</p>	

DISCLAIMER

All information, statements, data, advice, and/or recommendations, including, without limitation, those relating to storage, loading/unloading, piping, and transportation (collectively referred to herein as "information") are believed to be accurate, reliable, and based on reliable industry and regulatory references. However, no representation or warranty, expressed or implied, is made as to its completeness, accuracy, fitness for a particular purpose or any other matter, including, without limitation, that the practice or application of any such information is free of patent infringement or other intellectual property misappropriation. The Company providing this SDS is not engaged in the business of providing technical, operational, engineering, or safety information for a fee and therefore, any such information provided herein has been furnished as an accommodation and without charge. All information provided herein is intended for use by persons having requisite knowledge, skill, and experience in the chemical industry. The Company providing this SDS shall not be responsible or liable for the use, application, or implementation of the provided herein, and all such information is to be used at the risk, and in the sole judgment and discretion of such persons, their employees, advisors, and agents. This safety data sheet is offered for your information, consideration, and investigation as required by federal hazardous products act and related legislation.

END OF DOCUMENT