



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name SODIUM BICARBONATE
Version # 09
Revision date 09-February-2009
CAS # 144-55-8
Synonym(s) BICARBONATE OF SODA * SODIUM ACID CARBONATE * SODIUM HYDROGEN CARBONATE
Manufacturer CETCO
Construction Drilling Products
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Hoffman Estates, IL 60192 US
safetydata@amcol.com
<http://www.constructiondrilling.com/>
General Information (800) 527-9948
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2. Hazards Identification

Potential health effects

Eyes This product may cause slight irritation to the eyes.
Skin Non-irritating to the skin. Not expected to be a primary skin irritant.
Inhalation Dusts of this product may cause irritation of the nose, throat, and respiratory tract.
Ingestion Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

Chronic effects None known.

3. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

Composition comments This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

4. First Aid Measures

First aid procedures

Eye contact Flush eyes immediately with large amounts of water. Get medical attention if irritation develops or persists.
Skin contact No special measures required.
Inhalation Remove to fresh air. If tightness or congestion develops, get medical attention.
Ingestion Give several glasses of water. If ingestion of a large amount does occur, seek medical attention.

5. Fire Fighting Measures

Flammable properties This material will not burn.
Extinguishing media
Suitable extinguishing media Use any media suitable for the surrounding fires.

6. Accidental Release Measures

Personal precautions Ventilate enclosed areas.
Methods for cleaning up Clean up spills immediately, observing precautions in Protective Equipment section. Sweep up or gather material and place in appropriate container for disposal. Avoid the generation of dusts during clean-up.

7. Handling and Storage

Handling Keep formation of airborne dusts to a minimum.
Storage Keep at temperatures between 2 and 40°C. Keep in a well-ventilated place. Keep container tightly closed.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Constituents	Type	Value	Form
INERT OR NUISANCE DUST (SEQ250)	TWA	3 mg/m ³ 10 mg/m ³	Respirable particles. Inhalable particles.

U.S. - OSHA

Constituents	Type	Value	Form
INERT OR NUISANCE DUST (SEQ250)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
	TWA	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
15 mppcf	Respirable fraction.		

Engineering controls Good general ventilation should be sufficient to control airborne levels. Local exhaust is suggested for use, where possible, in enclosed or confined spaces.

Personal protective equipment

Eye / face protection Wear chemical goggles.

Skin protection Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.

9. Physical & Chemical Properties

Appearance	Crystalline. Powder.
Color	White.
Odor	None.
Odor threshold	Not available.
Physical state	Solid.
Form	Not available.
pH	Not available.
Melting point	Not available.
Freezing point	Not available.
Boiling point	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	< -0.0001 kPa at 25°C
Vapor density	Not available.
Specific gravity	2.159
Relative density	2.2 g/cm ³
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Bulk density	0.98 g/cm ³ at 20 °C

Percent volatile 0 %
Molecular weight 84.0100 g/mol
Molecular formula C-H2-O3.Na

10. Chemical Stability & Reactivity Information

Chemical stability Stable at normal conditions.
Conditions to avoid Exposure to moisture. High temperatures.
Incompatible materials Acids.
Hazardous decomposition products Carbon oxides.
Possibility of hazardous reactions Will not occur.

11. Toxicological Information

Toxicological data

Product	Test Results
SODIUM BICARBONATE (144-55-8)	Acute Dermal Human: 30 mg/day Acute Oral LD50 Rat: 4220 mg/kg

12. Ecological Information

Ecotoxicological data

Product	Test Results
SODIUM BICARBONATE (144-55-8)	EC50 Daphnia: 2350 mg/L 48.00 Hours LC50 Fish: 8625 mg/L 96.00 Hours LC50 Western mosquitofish (Gambusia affinis): 7550 mg/l 96.00 Hours

Ecotoxicity This product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.
Environmental effects Based on the physical properties of this product, significant environmental persistence and bioaccumulation would not be expected.
Persistence and degradability Not available.

13. Disposal Considerations

Disposal instructions Dispose in accordance with all applicable regulations.

14. Transport Information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance

No

Section 311 hazardous chemical

No

Food and Drug Administration (FDA)

Total food additive
Direct food additive
GRAS food additive

Inventory status

Country(s) or region

Inventory name

On inventory (yes/no)*

Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

HMIS ratings



NFPA ratings

Health: 0
Flammability: 0
Instability: 0

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use.

Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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Other information

CETCO is an AMCOL International company.