

Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 07/14/2003

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• **1 Identification of substance:**

◆ **Product details:**

◆ **Product name:** Sodium carbonate

◆ **Stock number:** 33377

◆ **Manufacturer/Supplier:**

Alfa Aesar, A Johnson Matthey Company
Johnson Matthey Catalog Company, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Emergency Phone: (978) 521-6300
CHEMTREC: (800) 424-9300
Web Site: www.alfa.com

◆ **Information Department:** Health, Safety and Environmental
Department

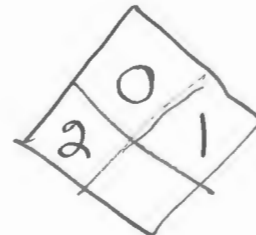
◆ **Emergency information:**

During normal hours the Health, Safety and Environmental Department.
After normal hours call Chemtrec at (800) 424-9300.

• **2 Composition/Data on components:**

◆ **Chemical characterization:**

Description: (CAS#)



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Sodium carbonate, anhydrous (CAS# 497-19-8): 100%

◆ Identification number(s):

◆ EINECS Number: 207-838-8

◆ EU Number: 011-005-00-2

• 3 Hazards identification

◆ Hazard description: Xi Irritant

◆ Information pertaining to particular dangers for man and environment

R 36 Irritating to eyes.

◆ Classification system

◆ HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

Health (acute effects) = 2

Flammability = 0

Reactivity = 1

• 4 First aid measures

◆ After inhalation

Supply fresh air. If required, provide artificial respiration.
Keep patient warm.
Seek immediate medical advice.

◆ After skin contact

Immediately wash with water and soap and rinse thoroughly.
Seek immediate medical advice.

◆ After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

♦ After swallowing Seek immediate medical advice.

• 5 Fire fighting measures

♦ Suitable extinguishing agents

Product is not flammable. Use fire fighting measures that suit the surrounding fire.

♦ Special hazards caused by the material, its products of combustion or

resulting gases:

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Sodium oxide

♦ Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

• 6 Accidental release measures

♦ Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

♦ Measures for environmental protection:

Do not allow material to be released to the environment without proper governmental permits.

♦ Measures for cleaning/collecting: Pick up mechanically.

♦ Additional information:

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

• 7 Handling and storage

♦ Handling

◆ **Information for safe handling:**

Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation at the workplace.
Prevent formation of dust.

◆ **Information about protection against explosions and fires:**

The product is not flammable

◆ **Storage**

◆ **Requirements to be met by storerooms and receptacles:**

No special requirements.

◆ **Information about storage in one common storage facility:**

Store away from water/moisture.
Do not store together with acids.

◆ **Further information about storage conditions:**

This product is hygroscopic.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Protect from humidity and water.

• **8 Exposure controls and personal protection**

◆ **Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with limit values that require monitoring at the workplace:

Not required.

◆ **Additional information: No data**

◆ **Personal protective equipment**

◆ **General protective and hygienic measures**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

◆ **Breathing equipment:**

Use suitable respirator when high concentrations are present.

◆ **Protection of hands:**

Impervious gloves

Check protective gloves prior to each use for their proper condition.

◆ **Material of gloves**

The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

◆ **Eye protection:** Safety glasses

◆ **Body protection:** Protective work clothing.

• **9 Physical and chemical properties:**

◆ **General Information**

◆ **Form:** Granules

◆ **Color:** White

◆ **Odor:** Odorless

◆	<u>Value/Range</u>	<u>Unit</u>
<u>Method</u>		

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◆ Change in condition

◆ Melting point/Melting range: 851 ° C

◆ Boiling point/Boiling range: Not determined

◆ Sublimation temperature / start: Not determined

◆ Flash point: Not applicable

◆ Ignition temperature: Not determined

◆ Decomposition temperature: Not determined

◆ Danger of explosion:

Product does not present an explosion hazard.

◆ Explosion limits:

◆ Lower: Not determined

◆ Upper: Not determined

◆ Vapor pressure: Not determined

◆ Density: at 20 ° C 2.532 g/cm³

◆ Solubility in / Miscibility with

♦ Water:

Not determined

• 10 Stability and reactivity

♦ Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

♦ Materials to be avoided:

Water/moisture

Acids

♦ Dangerous reactions No dangerous reactions known

♦ Dangerous products of decomposition:

Carbon monoxide and carbon dioxide

Sodium oxide

• 11 Toxicological information

♦ Acute toxicity:

LD/LC50 values that are relevant for classification:

Oral: LD50: 6600 mg/kg (mus)

LD50: 4090 mg/kg (rat)

LDLo: 714 mg/kg (man)

Inhalative: LC50/2H: 800 mg/m³/2H (gpg)

LC50/2H: 1200 mg/m³/2H (mus)

LC50/2H: 2300 mg/m³/2H (rat)

Irritation of skin: mild: 500 mg/24H (rbt)

Irritation of eyes: mild: 100 mg/30S (rbt)

moderate: 100 mg/24H (rbt)

severe: 50 mg (rbt)

♦ Primary irritant effect:

♦ on the skin: Irritant to skin and mucous membranes.

♦ on the eye: Irritating effect.

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♦ **Sensitization:** No sensitizing effects known.

♦ **Other information (about experimental toxicology):**

Reproductive effects have been observed on tests with laboratory animals.

♦ **Subacute to chronic toxicity:**

♦ **Subacute to chronic toxicity:**

The Registry of Toxic Effects of Chemical Substances (RTECS) reports the following effects in laboratory animals:

Behavioral - general anesthetic.

Behavioral - muscle contraction or spasticity.

Gastrointestinal - ulceration or bleeding from small intestine.

Gastrointestinal - other changes.

Lungs, Thorax, or Respiration - dyspnea.

Lung, Thorax, or Respiration - cough.

Lungs, Thorax, or Respiration - cyanosis.

Lungs, Thorax, or Respiration - emphysema.

Immunological Including Allergic - decrease in cellular immune response.

Vascular - BP elevation not characterized in autonomic section.

Sense Organs and Special Senses (Olfaction) - change in sensation of smell.

Sense Organs and Special Senses (Eye) - lacrimation.

Sense Organs and Special Senses (Eye) - conjunctive irritation.

Reproductive - Fertility - pre-implantation mortality (e.g. reduction in number of implants per female; total number of implants per corpora lutea)

♦ **Additional toxicological information:**

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

• **12 Ecological information:**

♦ **General notes:**

Do not allow material to be released to the environment without proper governmental permits.

• 13 Disposal considerations

♦ Product:

♦ Recommendation

Consult state, local or national regulations to ensure proper disposal.

♦ Uncleaned packagings:

♦ Recommendation:

Disposal must be made according to official regulations.

• 14 Transport information

Not a hazardous material for transportation.

♦ DOT regulations:

♦ Hazard class: None

♦ Land transport ADR/RID (cross-border)

♦ ADR/RID class: None

♦ Maritime transport IMDG:

♦ IMDG Class: None

♦ Air transport ICAO-TI and IATA-DGR:

♦ ICAO/IATA Class: None

♦ Transport/Additional information:

Not dangerous according to the above specifications.

• 15 Regulations

♦ Product related hazard informations:

♦ Hazard symbols: Xi Irritant

♦ Risk phrases: 36 Irritating to eyes.

♦ Safety phrases:

22 Do not breathe dust.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

♦ National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

• 16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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◆ **Department issuing MSDS:** Health, Safety and Environmental
Department.

◆ **Contact:** Darrell R. Sanders