

CO2 (Bicarbonate)

Date 11.9.2007

Previous date: 17.3.2004

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING**1.1 Identification of the article****1.1.1 Commercial Product Name**

CO2 (Bicarbonate)

1.1.2 Product code

981371

1.2 Use of the Substance/Preparation**1.2.1 Expressed in writing**

In vitro diagnostic reagent for the clinical chemistry analyser.

1.3 Identification of the substance/preparation and the company/undertaking**1.3.1 Supplier**

Thermo Fisher Scientific Oy, Clinical Diagnostics Finland

1.3.2 Contact information:

Ratastie 2, P.O.Box 100
FI-01621 Vantaa
FINLAND
+358-9-329 100
+358-9-3291 0300
FI09215470

2. COMPOSITION/INFORMATION ON INGREDIENTS**2.1 Hazardous components****2.1.1****CAS number
or other code**

26628-22-8

2.1.2**Chemical name of the substance**

Sodiumazide

2.1.3**Concentration**

<1 %

2.1.4**Classification**

T+; R28;R32

N; R50/53

Very toxic, Dangerous for the
environment**3. HAZARDS IDENTIFICATION**

Harmful if swallowed.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES**4.1 Additional advice**

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4.2 Inhalation

Move to fresh air.

4.3 Skin contact

Take off all contaminated clothing immediately. Wash off with soap and water. If symptoms persist, call a physician.

4.4 Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

4.5 Ingestion

Do not induce vomiting. Drink plenty of water. If symptoms persist, call a physician.

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5. FIRE-FIGHTING MEASURES

- 5.1 Suitable extinguishing media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 5.3 Specific hazards**
Decomposes on heating emitting oxides of nitrogen and oxides of carbon.
- 5.4 Special protective equipment for firefighters**
Suitable respiratory equipment, flame retardant protective clothing.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions**
Use personal protective equipment. Ensure adequate ventilation.
- 6.2 Environmental precautions**
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- 6.3 Methods for cleaning up**
Use a non-sparking shovel and place into a suitably labeled container for later disposal. Do not dry sweep. Avoid dust formation.

7. HANDLING AND STORAGE

- 7.1 Handling**
Avoid generating dusts.
- 7.2 Storage**
Keep at temperatures between 2 and 8 °C. Store away from oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 Exposure Limit Values**
- 8.1.1 HTP values**
- | | | | |
|------------|-------------|-------------------------------------|--------------------------------|
| 26628-22-8 | Sodiumazide | 0.1 mg/m ³ (8 h)
skin | 0.3 mg/m ³ (15 min) |
|------------|-------------|-------------------------------------|--------------------------------|
- 8.2 Exposure controls**
- 8.2.1 Occupational exposure controls**
Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation.
- 8.2.1.1 Respiratory protection**
Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment.
- 8.2.1.2 Hand protection**
Protective gloves: PVC, natural rubber.
- 8.2.1.3 Eye protection**
Goggles.
- 8.2.1.4 Skin and body protection**
Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 General Information (appearance, odour)**
White, odourless, dry powder.
- 9.2 Important Health Safety and Environmental Information**
- 9.2.1 pH** 8.05
- 9.2.2 Boiling point/range** -
- 9.2.3 Flash point** -

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9.2.5	Explosive properties	
9.2.5.1	Lower explosion limit	-
9.2.5.2	Upper explosion limit	-
9.2.7	Vapour pressure	-
9.2.8	Relative density	-
9.2.9	Solubility	
9.2.9.1	Water solubility	-
9.2.9.2	Fat solubility (solvent - oil to be specified)	-
9.2.10	Partition coefficient (n-octanol/water)	-

10. STABILITY AND REACTIVITY

- 10.1 Conditions to avoid**
Must not be stored in the heat or near hot objects.
- 10.3 Hazardous decomposition products**
Decomposes on heating emitting oxides of nitrogen and oxides of carbon.

11. TOXICOLOGICAL INFORMATION

- 11.1 Acute toxicity**
Sodiumazide (NaN_3):
LD50/oral/rat = 27 mg/kg
LD50/dermal/rabbit = 20 mg/kg
LDLo/oral/human= 143 mg/kg
Systemic effects: CNS disorders, cardiovascular failure, tachycardia, drop in blood pressure, coughing, dyspnea, spasms, headache, dizziness, nausea, vomiting, collapse, unconsciousness.
- 11.2 Primary irritation**
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May cause irritation to mouth, throat and stomach.
May cause irritation to the eyes, with effects including: tearing and blurred vision. These effects are anticipated to be of a short acting nature, if the product is removed promptly.
May cause irritation to the skin, with effects including: redness and itchiness.
- 11.3 Sensitisation**
Chronic exposure may cause dermatitis.

12. ECOLOGICAL INFORMATION

- 12.1 Ecotoxicity**
- 12.1.1 Aquatic toxicity**
Sodiumazide (NaN_3):
LC50/96 h/fish (*L. macrochirus*)= 0.7 mg/l
EC50/96 h/daphnia = 4.2 mg/l
IC50/mixed culture of green algae:272 mg/l
- 12.1.2 Toxicity to other organisms**
Sodiumazide (NaN_3):
EC50/Photobacterium phosphoreum= 38.5 mg/l
- 12.2 Mobility**
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- 12.3 Persistence and degradability**
- 12.3.1 Biodegradation**
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12.3.2 Chemical degradation

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12.4 Bioaccumulative potential

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13. DISPOSAL CONSIDERATIONS

The product has to be disposed of as laboratory chemical in accordance with local regulations.

14. TRANSPORT INFORMATION**14.3 Land transport****14.3.1 Class**

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14.3.2 Risk No.

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14.3.3 Description of the goods

-

14.4 Sea transport**14.4.1 IMDG**

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14.4.2 Proper shipping name

-

14.4.3 Further Information

-

14.5 Air transport**14.5.1 ICAO/IATA**

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14.5.2 Proper shipping name

-

14.5.3 Further Information

-

15. REGULATORY INFORMATION**15.1 Information on the warning label****EC Label**

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15.1.1 Letter code of the warning symbol and indications of danger for the preparation

Xn Harmful

15.1.2 Names of the ingredients given on the warning label

Sodiumazide

15.1.3 R-phrases(s)

R21/22

Harmful in contact with skin and if swallowed.

R52/53

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

15.1.4 S-phrase(s)

S28b

After contact with skin, wash immediately with plenty of water.

S45

In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

15.1.5 Special regulations on certain preparations

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16. OTHER INFORMATION**16.1 List of the relevant R phrases**

R21/22

Harmful in contact with skin and if swallowed.

R52/53

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R28

Very toxic if swallowed.

R32

Contact with acids liberates very toxic gas.

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R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

16.4 Additional information available from:

Code of the Material Safety Data Sheet: D01996-03-03-MSDS-CO2 (Bicarbonate)-EN
Corporation mentioned in point 1.3.

The information in this datasheet is to our best knowledge correct and complete, and is offered in good faith as accurate. It characterizes the product with regard to the appropriate safety precautions. It does not guarantee properties of the product.

16.5 Literary reference

The MSDS of the manufacturer.

This product has been evaluated in accordance with the directives 1967/548/EEC, 199/45/EC and 2001/58/EC.

16.6 Additions, Deletions, Revisions

Changes in the sections 1.3 and 16.

Date

11.09.2007

Signature

LMKo