

Health & Safety data sheet
According to EC Directive 91/155/EC and following amendments

Date of issue: 28 April 2004.

SECTION 1 - IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

Product name:

Hardness Buffer

Application:

Determination of hardness in water samples.

Manufacturer identification: Hanna Instruments Italia s.r.l.
 Viale delle Industrie, 12/A
 35010 Villafranca Padovana, Italy
 tel.: +39-049-9070211

Emergency Telephone n. °: No hazardous product

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

NAME (EC directives)	EC-Index-No.	CAS No.	LABELLING (EC directives)	CONTENT
Sodium carbonate anhydrous	011-005-00-2	497-19-8	Xi R36	≥1% - < 10%

(full text of R phrases in section 16).

SECTION 3 - HAZARD IDENTIFICATION

The concentration of the hazardous ingredient is below the limits of classification: a classification according to categories of danger as specified in directive 67/548/EC is not required.

Risk cannot be excluded if the product is handled improperly.

SECTION 4 - FIRST AID MEASURES

- **After inhalation** : fresh air.
- **After skin contact** : wash off with plenty of water.
- **After eye contact** : rinse out with water.
- **After swallowing** : wash out mouth thoroughly with water and give plenty of water to drink. In severe cases obtain medical attention.

SECTION 5 – FIRE-FIGHTING MEASURES

- **Suitable extinguishing media**
- water spray, foam, dry powder or carbon dioxide.
- **Special risks:**
- NA
- **Special protective equipment for fire fighting:**
- do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.
- **Additional information:**
- Non-combustible.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

- **Personal precautions:**
- Do not inhale vapors. Avoid substance contact.
- **Environmental precautions:**
- None.

Health & Safety data sheet
According to EC Directive 91/155/EC and following amendments

SECTION 7 - HANDLING AND STORAGE

- **Handling:**
 - No further requirements.
- **Storage:**
 - Tightly closed. Store at room temperature (+15 to +25 °C recommended).

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

- **Personal protective equipment:**
 - as appropriate to quantity handled.
- **Protective gloves:**
 - rubber or plastic
- **Respiratory protection:**
 - required when vapors/aerosols are generated.
- **Eye protection:**
 - goggles or face mask

SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES

- **appearance and odor** : liquid, odorless
- **solubility in water** : Soluble
- **melting point** : NA
- **explosion limits** : NA
- **pH value at 20°C** : ~11.3
- **boiling point** : NA
- **ignition temperature** : NA
- **flash point** : NA
- **density at 20°C** : 1.08 g/cm³

SECTION 10 - STABILITY AND REACTIVITY

- **Conditions to be avoided:**
 - strong heating.
- **Substances to be avoided:**
 - the generally known reaction partners of water.
- **Hazardous decomposition products:**
 - in the event of fire: see section 5.
- **Hazardous polymerization:**
 - will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Quantitative data on the toxicity of this product are not available.

APPLICABLE TO PARTIAL COMPONENT(S):

The following applies to Sodium Carbonate Anhydrous – as the pure substance:

Acute toxicity

LC 50 (inhalation, rat): 2.3 mg/l /2 h.

LD 50 (oral, rat): 4090 mg/kg.

Specific symptoms in animal studies:

Eye irritation test (rabbit): Severe irritations.

Skin irritation test (rabbit): Slight irritations.

Subacute to chronic toxicity

Bacterial mutagenicity: Escherichia coli: negative.

No teratogenic effect in animal experiments.

Property of this product must be anticipated on the basis from the components of the preparation:

- **In case of inhalation** : slight irritations.
- **In case of skin contact** : slight irritations.
- **In case of eye contact** : slight irritations.
- **In case of ingestion of large quantities** : irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.
- **Further data** : Further hazardous properties cannot be excluded if handled improperly.

Health & Safety data sheet
According to EC Directive 91/155/EC and following amendments

SECTION 12 - ECOLOGICAL INFORMATION

- **Ecotoxic effect** : quantitative data on the ecological effect of this product are not available.
- **Further ecological data** : no ecological problems are to be expected when the product is handled and used with due care and attention.

SECTION 13 - DISPOSAL CONSIDERATIONS

- **Waste disposal:**
 - Can be safely disposed off as an ordinary refuse.

SECTION 14 - TRANSPORT INFORMATION

Not subject to transport regulation.

SECTION 15 - REGULATORY INFORMATION**Labeling according to EC Directives:**

Symbol: -
R-phrases: -
S-phrases: -
Contains: -

SECTION 16 - OTHER INFORMATION

- **Text of any R phrases referred to under heading 2:**
 - 36 : Irritating to eyes.
- **Supersedes edition of** : June 2002
- **Reason for revision** : change in labeling after reevaluation.
- **Legend** : NA Not applicable
ND Not determined

THE INFORMATION CONTAINED HEREIN IS BASED ON THE PRESENT STATE OF OUR KNOWLEDGE. IT CHARACTERIZES THE PRODUCT WITH REGARD TO THE APPROPRIATE SAFETY PRECAUTIONS. IT DOES NOT REPRESENT A GUARANTEE OF THE PROPERTIES OF THE PRODUCT.