

Alkaline phosphatase (SCE) reagent A

Date 5.9.2007

Previous date: 12.3.2004

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

Alkaline phosphatase (SCE) reagent A

1.1.2 Product code

981359

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

1.4 Emergency telephone number**1.4.1 Telephone number, name and address**

-

2. COMPOSITION/INFORMATION ON INGREDIENTS**2.1 Hazardous components**

2.1.1 CAS number or other code	2.1.2 Chemical name of the substance	2.1.3 Concentration	2.1.4 Classification
111-42-2	Diethanolamine	10.6 %	Xn; 22-48/22; Xi; R38-41 Harmful, Irritant

2.1.7 Further information

-

3. HAZARDS IDENTIFICATION

Harmful: danger of serious damage to health by prolonged exposure if swallowed. Irritating to eyes.

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

-

4.2 Inhalation

-

4.3 Skin contact

Wash off with plenty of water.

4.4 Eye contact

Rinse immediately with plenty of water and seek medical advice.

4.5 Ingestion

Call a physician immediately.

Alkaline phosphatase (SCE) reagent A

Date 5.9.2007

Previous date: 12.3.2004

5. FIRE-FIGHTING MEASURES

- 5.1 Suitable extinguishing media**
Carbon dioxide (CO₂), foam, water
- 5.3 Specific hazards**
Fire may cause produce fumes hazardous to health.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions**
-
- 6.2 Environmental precautions**
-
- 6.3 Methods for cleaning up**
Rinse with water.

7. HANDLING AND STORAGE

- 7.1 Handling**
Avoid contact with skin and eyes.
- 7.2 Storage**
Must be stored in cool plase and away from acids.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 Exposure Limit Values**
- 8.1.1 HTP values**
- | | | | |
|----------|----------------|----------------|---------------------------|
| 111-42-2 | Diethanolamine | 0,46 ppm (8 h) | 2 mg/m ³ (8 h) |
|----------|----------------|----------------|---------------------------|
- 8.2 Exposure controls**
- 8.2.1 Occupational exposure controls**
-
- 8.2.1.1 Respiratory protection**
-
- 8.2.1.2 Hand protection**
Protective gloves (e.g. butylrubber, nitrile rubber, neoprene gloves).
- 8.2.1.3 Eye protection**
Safety glasses.
- 8.2.1.4 Skin and body protection**
Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 General Information (appearance, odour)**
With a smell of ammonia, liquid, colourless.
- 9.2 Important Health Safety and Environmental Information**
- 9.2.1 pH** 10.0
- 9.2.2 Boiling point/range** n.100 °C (water)
- 9.2.3 Flash point** 134 °C (Diethanolamine)
- 9.2.5 Explosive properties**
- 9.2.5.1 Lower explosion limit** -
- 9.2.5.2 Upper explosion limit** -

Alkaline phosphatase (SCE) reagent A

Date 5.9.2007

Previous date: 12.3.2004

9.2.7	Vapour pressure	-
9.2.8	Relative density	-
9.2.9	Solubility	
9.2.9.1	Water solubility	completely soluble
9.2.9.2	Fat solubility (solvent - oil to be specified)	-
9.2.10	Partition coefficient (n-octanol/water)	Diethanolamine, log K_{ow} = -1.43
9.2.11	Viscosity	-
9.3	Other data	-

10. STABILITY AND REACTIVITY

- 10.1 Conditions to avoid**
When exposed to heat or fire may react with oxidizing materials.
- 10.3 Hazardous decomposition products**
-

11. TOXICOLOGICAL INFORMATION

- 11.1 Acute toxicity**
LD50/oral/rat = 710 mg/kg
- 11.2 Primary irritation**
-
- 11.3 Sensitisation**
-
- 11.5 Human experience**
-
- 11.6 Other information of acute toxicity**
Target organs are kidneys, liver, ureter and urinary bladder. Heavy exposure may cause normocytic anemia, changes in the composition of urine.

12. ECOLOGICAL INFORMATION

- 12.1 Ecotoxicity**
- 12.1.1 Aquatic toxicity**
-
- 12.1.2 Toxicity to other organisms**
-
- 12.2 Mobility**
Diethanolamine may become watersoluble in ground water. Protonated diethanolamine may be absorbed into the soil.
- 12.3 Persistence and degradability**
- 12.3.1 Biodegradation**
The half-life of diethanolamine in water and in soil is from a few days to a few weeks.
- 12.3.2 Chemical degradation**
The half-life of diethanolamine is 4h when it reacts in the air with photochemically formed hydroxyl compounds.
- 12.4 Bioaccumulative potential**
-
- 12.5 Other adverse effects**
-

Alkaline phosphatase (SCE) reagent A

Date 5.9.2007

Previous date: 12.3.2004

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	-
14.3.2 Risk No.	-
14.3.3 Description of the goods	Alkaline phosphatase reagent
14.3.4 Further Information	-

14.4 Sea transport

14.4.1 IMDG	-
14.4.2 Proper shipping name	Diethanolamine-MgCl ₂ -buffer solution
14.4.3 Further Information	-

14.5 Air transport

14.5.1 ICAO/IATA	-
14.5.2 Proper shipping name	Diethanolamine-MgCl ₂ -buffer solution
14.5.3 Further Information	-

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

EC Label 203-868-0

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

Diethanolamine

15.1.3 R-phrases(s)

R41 Risk of serious damage to eyes.
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

15.1.4 S-phrases(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S46 If swallowed, seek medical advice immediately and show this container or label.

15.1.5 Special regulations on certain preparations

-

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

R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

16.4 Additional information available from:

Code of the Material Safety Data Sheet: D01191-03-03-MSDS-Alkaline phosphatase (SCE)-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.

Alkaline phosphatase (SCE) reagent A

Date 5.9.2007

Previous date: 12.3.2004

16.5 Literary reference

This product has been evaluated in accordance with the directives 1967/548/EEC, 1999/45/EC and 2001/58/EC.

16.6 Additions, Deletions, Revisions

Changes in the sections 1.3 and 16.

Date

05.09.2007

Signature

LMKo