

Safety Data Sheet

According to Regulation (EC) No 1272/2008 (CLP) and GHS

SDS summaryProduct name: **ELISA substrate: pNPP for ALP**Product code: **3652-P10**

Component	Substance/Mixture	CAS No.	EC No.	Conc.	Hazard pictogram code	Hazard statements
pNPP	Diethanolamine	111-42-2	203-868-0	10 %	GHS05 GHS08	H302 H315 H318 H373

If applicable, components listed in the summary above are further specified below into 16 sections according to the Regulation (EC) No 1272/2008 (CLP) and GHS.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: **ELISA substrate: pNPP for ALP**
Component: **pNPP**
Substance/Mixture: **Diethanolamine**

1.2 Relevant identified uses and uses advised against

Recommended use: **Laboratory chemical for research use only**
Uses advised against: **No information available**

1.3 Supplier

Mabtech AB
Box 1233,
SE 131 28 Nacka Strand, Sweden
Tel: +46 8 716 27 00
Email: mabtech@mabtech.com

1.4 Emergency telephone number

Contact your local emergency number.

SECTION 2: Hazards identification

2.1 Classification of mixture

According to Regulation (EC) No 1272/2008 (CLP)

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Hazard pictogram



Signal word

Danger

Precautionary statements:

P301 + P330 If swallowed: Rinse mouth

P352 If on skin: Rinse with plenty of water

P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing

2.3 Other hazards

Not applicable

SECTION 3: Composition/information on ingredients

3.1 Description of the mixture

Aqueous solution of p-nitrophenyl phosphate (pNPP) containing 10% diethanolamine

3.2 Hazardous ingredients

Substance	CAS No.	EC No.	Conc.	Classification according to Regulation (EC) No 1272/2008 [CLP]
Diethanolamine	111-42-2	203-868-0	10 %	H302 Harmful if swallowed H315 Causes skin irritation H318 Causes serious eye damage H373 May cause damage to organs through prolonged or repeated exposure

SECTION 4: First aid measures

4.1 Description of first aid measures

- a) Following inhalation:
Move into fresh air. Seek medical attention for any breathing difficulty.
- b) Following skin contact:
Remove contaminated clothing. Wash with water and soap, rinse thoroughly. Seek medical attention if irritation persists.
- c) Following eye contact:
Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.
- d) Following ingestion:
Do not induce vomiting. Rinse mouth with water. Consult medical personnel for actions to take.

4.2 Most important symptoms and effects

Causes skin irritation and serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 General information

Not flammable or combustible.

5.2 Extinguishing media

No known restrictions; use any means suitable for nearby fire.

5.3 Special hazards arising from the substance or mixture

Toxic gases and vapors may be released if involved in a fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use gloves, eye protection and good hygienic practices.

6.2 Environmental precautions

Prevent further leakage. Do not let large volumes enter into drains.

6.3 Methods and material for containment and cleaning up

Collect large spills as chemical waste according to local regulations.

6.4 Reference to other sections

See section 8 for information on safe handling.

See section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid skin contact, use gloves. Avoid contact with eyes. Use good hygienic practices. Wash hands after use.

7.2 Technical measures and storage conditions

Store in closed containers in the dark at 2-8 °C. Allow only portion to be used to equilibrate to room temperature.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Exposure controls/personal protection

None in particular.

8.2 Personal protective equipment

a) Eye protection	Recommended
b) Hand protection	Recommended
c) Skin and body protection	Recommended
d) Respiratory protection	No specific requirements
e) Thermal hazards	No specific requirements

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state at room temperature	Liquid
b) Appearance	Clear to light yellow
c) Odour	Minimal odour
d) pH	pH=9
e) Melting/freezing point	Not determined
f) Boiling point/range	Not determined
g) Flash point	Not determined
h) Evaporation rate	Not determined
i) Flammability (sold, gas)	Not determined
j) Flammability in air	Not determined
a) Upper flammability limit	Not determined
b) Lower flammability limit	Not determined
k) Vapour pressure	Not determined
l) Vapour density	Not determined
m) Relative density	Not determined

n) Water solubility	Soluble
o) Solubility in other solvents	Not determined
p) Auto ignition temperature	Not self-igniting
q) Decomposition temperature	Not determined
r) Viscosity, kinematic	Not determined
s) Explosive properties	No information available

9.2 Information on basic physical and chemical properties

Mildly basic, aqueous solution.

SECTION 10: Stability and reactivity

10.1 Reactivity

No known hazardous reactions

10.2 Chemical stability

Stable under recommended use and storage conditions.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.3 Conditions to avoid

Elevated temperature and light exposure may cause yellow color formation.

10.4 Incompatible materials

Strong acids, strong oxidizing agents. Contact with metal or metal surfaces may cause color formation.

10.6 Hazardous decomposition products

High temperature or fire conditions may cause toxic vapor formation, including oxides of carbon, nitrogen, and formation of hydrogen chloride gas.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- a) Acute toxicity:
Diethanolamine has been reported to be slightly toxic in mice, rats and rabbits. Nausea and stomach pain may occur on ingestion.
- b) Skin corrosion/irritation:
May cause irritation and redness.
- c) Serious eye damage/irritation:
May cause irritation and redness.
- d) Sensitization to the respiratory tract/skin:
May cause irritation and redness.
- e) Germ cell mutagenicity
No data available.
- f) Carcinogenicity
Diethanolamine has been reported to be carcinogenic in mice. The US National Toxicity program has proposed classifying diethanolamine as a substance that is “reasonably anticipated to be a human carcinogen”.
- g) Reproductive toxicity:
No data available.

- h) Specific organ toxicity - single exposure
No data available.
- i) Specific target organ toxicity- repeated exposure
No data available.
- j) Inhalation
There may be irritation of the throat with a feeling of tightness in the chest.

11.2 Additional information

Not data available.

SECTION 12: Ecological information

12.1 Toxicity

- a) Aquatic toxicity:
Not determined.
- b) Sediment toxicity:
Not determined.
- c) Terrestrial toxicity:
Not determined.

12.2 Persistence and degradability

Not determined.

12.3 Bioaccumulative potential

Not determined.

12.4 Mobility in soil

Not determined.

12.5 Results of PBT and vPvB assessment

Not determined.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- a) Waste from residues or unused products:
Dispose the non-hazardous waste according to local regulations.
- b) Packaging:
Empty container is not considered as hazardous waste.

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea (IMDG/ADN)	Air (IATA)
14.1 <u>UN number</u>	Not applicable	Not applicable	Not applicable
14.2 <u>Proper shipping name</u>	Not applicable	Not applicable	Not applicable
14.3 <u>Transport hazard class (es)</u>	Not applicable	Not applicable	Not applicable

<u>14.4 Packaging group</u>	Not applicable	Not applicable	Not applicable
<u>14.5 Environmental hazards</u>	Not applicable		
<u>14.6 Special precautions for user</u>	Not applicable		
<u>14.7 Maritime transport in bulk according to IMO instruments</u>	Not applicable		

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Hazards: The product mixture contains 10% diethanolamine, which is toxic by inhalation, toxic by ingestion , and toxic by skin absorption.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or mixture by the supplier

SECTION 16: Other information

The information in this SDS is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The product is supplied for research use only. Mabtech shall not be liable for the use or handling of the product or for consequential, special, indirect or incidental damage therefrom.

END of SDS