Printing date 29.05.2012

Revision: 24.05.2012

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

- · Product identifier
- · Trade name: Testoval Chlor DPD Test A
- · Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the preparation: Reagent for analysis
- · Details of the supplier of the safety data sheet

Manufacturer/Supplier: Gebrüder Heyl Analysentechnik GmbH & Co. KG Orleansstraße 75 b D-31135 Hildesheim

Phone +49 (0) 5121 289330 Fax +49 (0) 5121 2893367 E-Mail info@heyl.de Internet www.heyl.de

 Further information obtainable from: product safety department
 Emergency telephone number: Giftinformationszentrum Nord Phone +49 (0) 551 19240

2 Hazards identification

· Classification of the substance or mixture

- · Classification according to Regulation (EC) No 1272/2008
- The product is not classified according to the CLP regulation.
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- Information concerning particular hazards for human and environment: The product does not have to be labelled due to the calculation procedure of the "General
- Classification guideline for preparations of the EU" in the latest valid version.
- · Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· Label elements

· Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description:

Mixture of substances listed below with nonhazardous additions. Sodium acetate CAS 6131-90-4 Water CAS 7732-18-5

· Dangerous components: Void

• Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.

(Contd. on page 2)

EU

Printing date 29.05.2012

Version number 3

Revision: 24.05.2012

Trade name: Testoval Chlor DPD Test A

- (Contd. of page 1)

 After skin contact:

 Immediately wash with water and soap and rinse thoroughly.
 If skin irritation continues, consult a doctor.

 After eye contact:

 Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
 - After swallowing:
 - A person vomiting while laying on their back should be turned onto their side. Rinse out mouth and then drink plenty of water. Seek medical treatment.
 - · Information for doctor:
 - *Most important symptoms and effects, both acute and delayed* No further relevant information available.
 - Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture In case of fire, the following can be released: Acetic acid
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear personal protection equipment.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of the material collected according to regulations. Clean the affected area carefully; suitable cleaners are: Warm water

Reference to other sections
 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:
- · Precautions for safe handling No special measures required.
- · Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:
- Keep container tightly sealed.
- Protect from heat and direct sunlight. Store receptacle in a well ventilated area.
- Recommended storage temperature: 15 25 °C

(Contd. on page 3)

EU

Printing date 29.05.2012

Version number 3

Revision: 24.05.2012

Trade name: Testoval Chlor DPD Test A

· Specific end use(s) No further relevant information available.

(Contd. of page 2)

8 Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

- · Control parameters
- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:
- The usual precautionary measures are to be adhered to when handling chemicals.
- · Respiratory protection: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling

Information on basic physical and chemical properties General Information			
Appearance:			
Form:	Fluid		
Colour:	Colourless		
Odour:	Characteristic		
pH-value (100 g/l) at 20°C:	5,8		
Change in condition Melting point/Melting range Boiling point/Boiling range			
Flash point:	Not applicable.		
Self-igniting:	Product is not selfigniting.		
Danger of explosion:	Product does not present an explosion hazard.		
Density at 20°C:	1,05 g/cm³		
Solubility in / Miscibility with			
water:	Fully miscible.		

Printing date 29.05.2012

Version number 3

Revision: 24.05.2012

(Contd. of page 3)

Trade name: Testoval Chlor DPD Test A

· Other information

No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: Acetic acid

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation Disposal must be made according to official regulations.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

(Contd. on page 5)

Printing date 29.05.2012

Version number 3

Revision: 24.05.2012

Trade name: Testoval Chlor DPD Test A

(Contd. of page 4)

· UN-Number · ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	
· ADR	Void
· ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	Void
· Packing group	
· ADR, IŇĎG, IATA	Void
· Environmental hazards:	
Marine pollutant:	No
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex II of	
MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications
· UN "Model Regulation":	

15 Regulatory information

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS: product safety department.

· Contact:

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

International Carriage of Dangerous Goods by Road) RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

Printing date 29.05.2012

Revision: 24.05.2012

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

- · Product identifier
- · Trade name: Testoval Chlor DPD Test B
- \cdot Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation: Reagent for analysis
- · Details of the supplier of the safety data sheet

Manufacturer/Supplier: Gebrüder Heyl Analysentechnik GmbH & Co. KG Orleansstraße 75 b D-31135 Hildesheim

Phone +49 (0) 5121 289330 Fax +49 (0) 5121 2893367 E-Mail info@heyl.de Internet www.heyl.de

 Further information obtainable from: product safety department
 Emergency telephone number: Giftinformationszentrum Nord Phone +49 (0) 551 19240

2 Hazards identification

· Classification of the substance or mixture

- · Classification according to Regulation (EC) No 1272/2008
- The product is not classified according to the CLP regulation.
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- Information concerning particular hazards for human and environment: The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- · Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· Label elements

· Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

· Special labelling of certain preparations:

Safety data sheet available for professional user on request.

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

• **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

	Dungerous components.		
	CAS: 6283-63-2	N,N-diethylbenzene-1,4-diammonium sulphate	<u>≤2,5%</u>
	EINECS: 228-500-6	😡 T R25	
		🛞 Acute Tox. 3, H301	
 Additional information: For the wording of the listed risk phrases refer to section 16. 			
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(Contd. on page 2)

Printing date 29.05.2012

Version number 3

Revision: 24.05.2012

Trade name: Testoval Chlor DPD Test B

(Contd. of page 1)

4 First aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
 - If skin irritation continues, consult a doctor.
- · After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. · After swallowing:
- A person vomiting while laying on their back should be turned onto their side. Rinse out mouth and then drink plenty of water. Seek medical treatment.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam. · Special hazards arising from the substance or mixture
- No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear personal protection equipment.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of the material collected according to regulations. Clean the affected area carefully; suitable cleaners are: Warm water

Reference to other sections 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:

- · Precautions for safe handling
- Prevent formation of aerosols.

Ensure good ventilation/exhaustion at the workplace.

- · Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.

(Contd. on page 3)

EU

Printing date 29.05.2012

Version number 3

Revision: 24.05.2012

(Contd. of page 2)

Trade name: Testoval Chlor DPD Test B

- Information about storage in one common storage facility: Not required. • Further information about storage conditions:
- Keep container tightly sealed. Protect from heat and direct sunlight. Store receptacle in a well ventilated area.

• Recommended storage temperature: 15 - 25 °C

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:
- The usual precautionary measures are to be adhered to when handling chemicals.
- · Respiratory protection: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

• Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling

General Information			
Appearance:	Fluid		
Form: Colour:	Fluid Yellow		
Odour:	Odourless		
pH-value (10 g/l) at 20°C:	3,5		
Change in condition Melting point/Melting rang Boiling point/Boiling range			
Flash point:	Not applicable.		

[·] Control parameters

Printing date 29.05.2012

Version number 3

Revision: 24.05.2012

Trade name: Testoval Chlor DPD Test B

	(Contd. of page 3)
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.
• Explosion limits: Lower: Upper:	2,6 Vol % 11,3 Vol %
· Density at 20°C:	1,26 g/cm³
 Solubility in / Miscibility with water: Other information 	Fully miscible. No further relevant information available.

10 Stability and reactivity

· Reactivity

- · Chemical stability
- · Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- Possibility of hazardous reactions Reacts with strong acids and oxidizing agents.
- Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.
- Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: Acrolein

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small guantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

(Contd. on page 5)

EU

Printing date 29.05.2012

Version number 3

Revision: 24.05.2012

Trade name: Testoval Chlor DPD Test B

· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Uncleaned packaging:

• Recommendation: Disposal must be made according to official regulations.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number · ADR, ADN, IMDG, IATA	Void
· UN proper shipping name · ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· ADR, ADN, IMDG, IATA · Class	Void
· Packing group · ADR, IMDG, IATA	Void
 Environmental hazards: Marine pollutant: 	No
 Special precautions for user 	Not applicable.
• Transport in bulk according to Annex II o MARPOL73/78 and the IBC Code	of Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	-

15 Regulatory information

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases H301 Toxic if swallowed.
- TISOT TOXIC II SWAllowed.

R25 Toxic if swallowed.

· Department issuing MSDS: product safety department.

· Contact:

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

(Contd. on page 6)

(Contd. of page 4)

[·] Recommendation Disposal must be made according to official regulations.

EU

Printing date 29.05.2012

Version number 3

Revision: 24.05.2012

Trade name: Testoval Chlor DPD Test B

ICAO: International Civil Aviation Organization GHS: Globally Harmonized System of Classification and Labelling of Chemicals (Contd. of page 5)

EU