

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002

Reviewed on 15.05.2002

1 Identification of substance:

· **Product details:**

In Vitro Technologies Pty Ltd
7-9 Summit Rd,
Noble Park, Vic 3174
Ph 03 9771 3700

· **Product name:** Iron LR

· **Catalog number:** 00515379

· **Manufacturer:**

Tintometer GmbH
Schleefstr. 8 a
44287 Dortmund Made in Germany

phone: 0049-231/9 45 10-0

· **Informing department:** Product safety department.

· **Emergency information:**

Beratungsstelle für Vergiftungserscheinungen und Embryonaltoxikologie
Giftnotruf Berlin phone: 0049-3 0/1 9240

AUSTRALIAN POISONS
INFORMATION CENTRE: 131126

2 Composition/Data on components:

· **Chemical characterization**

· **Description:** Mixture consisting of the following components.

· **Dangerous components:**

CAS: 124-04-9 EINECS Number: 204-673-3 EC Number: 607-144-00-9	adipic acid	Xi; R 36	50-60%
CAS: 65208-41-5 EINECS Number: 249-881-5	calcium thioglycollate tihydrate	T; R 25-36/37/38-43	0.1-1.0%

3 Hazards identification

· **Hazard designation:** Product is classified as hazardous according to the criteria of NOHSC.



Xi Irritant

· **Information pertaining to particular dangers for man and environment**

R 36 Irritating to eyes.

R 43 May cause sensitisation by skin contact.

· **Classification system**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

4 First aid measures

· **After inhalation**

Supply fresh air and call for doctor for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

· **After skin contact** Instantly wash with water and soap and rinse thoroughly.

· **After eye contact**

5 Fire fighting measures

· **Suitable extinguishing agents** Use fire fighting measures that suit the environment.

(Contd. on page 2)

Material Safety Data Sheet
According to 91/155 EC

Printing date 15.05.2002

Reviewed on 15.05.2002

Product name: Iron LR

(Contd. of page 1)

· **Protective equipment:** No special measures required.**6 Accidental release measures**

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Do not allow to enter drainage system, surface or ground water.
- **Measures for cleaning/collecting:** Collect mechanically.

7 Handling and storage

- **Handling**
- **Information for safe handling:** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class:**

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
 - **Components 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 that were valid during the compilation were used as basis.
 - **Personal protective equipment**
 - **General protective and hygienic measures**

Keep away from foodstuffs, beverages and food. Take off immediately all contaminated clothing

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

9 Physical and chemical properties:

· Form:	Tablets
· Colour:	Yellow
· Odour:	Strong
· Melting point/Melting range:	Not determined
· Boiling point/Boiling range:	265°C
· Flash point:	> 100°C
· Ignition temperature:	405.0°C
· Self-inflammability:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive.
· Vapour pressure at 20°C:	2.7 hPa

(Contd. on page 3)

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002

Reviewed on 15.05.2002

Product name: Iron LR

(Contd. of page 2)

· Density	Not determined
· Solubility in / Miscibility with Water:	Soluble
· pH-value at 20°C:	4
· Solvent content:	
Organic solvents:	0.0 %
· Solids content:	100.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

124-04-9 adipic acid

Oral	LD50	5700 mg/kg (rat)
------	------	------------------

10043-35-3 boric acid, crude natural, containing not more than 85 per cent of H3BO3 calculated on the dry weight

Oral	LD50	2660 mg/kg (rat)
------	------	------------------

Dermal	LD50	> 2000 mg/kg (rat)
--------	------	--------------------

· Primary irritant effect:

- **on the skin:** No irritant effect.
- **on the eye:** Irritant effect.
- **Sensitization:** Sensitization possible by skin contact.
- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC

12 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 bodies or sewage system.

13 Disposal considerations

· Product:

· Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to disposers of hazardous waste.

· Un cleaned packagings:

· **Recommendation:** Disposal must be made according to official regulations.

(Contd. on page 4)

Material Safety Data Sheet
According to 91/155 EC

Printing date 15.05.2002

Reviewed on 15.05.2002

Product name: Iron LR

(Contd. of page 3)

· **Recommended cleaning agent:** Water, if necessary with cleaning agent.

14 Transport information

· **Land transport ADR/RID (cross-border)**
· **ADR/RID-GGVS/E Class:** - Not classified as dangerous in the meaning of transport regulations.

· **Maritime transport IMDG:**
· **IMDG Class:** -
· **Marine pollutant:** No

· **Air transport ICAO-TI and IATA-DGR:**
· **ICAO/IATA Class:** - Not classified as dangerous in the meaning of transport regulations.

15 Regulatory information

· **Designation according to EC guidelines:**

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStofV)

· **Code letter and hazard designation of product:**
Xi Irritant

· **Hazard-determining components of labelling:**
calcium thioglycollate tihydrate

· **Risk phrases:**

36 Irritating to eyes.

43 May cause sensitisation by skin contact.

· **Safety phrases:**

2 Keep out of the reach of children. 24/25 Avoid contact with skin and eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

37 Wear suitable gloves.

46 If swallowed, seek medical advice immediately and show this container or label.

17 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing data specification sheet:** Environment protection department. · **Contact:** Dr. Robert Münzberg

GB

Australian Distributor:
Watertest Systems Pty Ltd
PO 375 Minto NSW 2566
Tel: 8706 5400

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002

Reviewed on 04.04.2002

1 Identification of substance:

· **Product details:**

· **Product name:** *Chlorine Content, DPD-1*

· **Catalog number:** 00511069

· **Supplier:**

In Vitro Technologies P/L

7-9 Summit Road

Noble Park Nth, Vic 3174

Ph 03 9771 3700 fax 03 9771 3720 email: info@invitro.com.au www.invitro.com.au

· **Emergency information:**

Poisons Information Centre 131126

2 Composition/Data on components:

· **Chemical characterization**

· **Description:** *Mixture consisting of the following components.*

· **Dangerous components:**

CAS: 6283-63-2

EINECS Number: 228-500-6

N,N-diethylbenzene-1,4-diammonium sulphate



Xn; R 21/22

0.1-1.0%

3 Hazards identification

· **Hazard designation:** *Not hazardous according to Worksafe Australia*

· **Information pertaining to particular dangers for man and environment void**

· **Classification system**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

4 First aid measures

· **General information** *No special measures required.*

· **After inhalation** *Supply fresh air; consult doctor in case of symptoms.*

· **After skin contact** *The product is not skin irritating.*

· **After eye contact** *Rinse opened eye for several minutes under running water.*

· **After swallowing** *In case of persistent symptoms consult doctor.*

5 Fire fighting measures

· **Suitable extinguishing agents**

CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

· **Protective equipment:** *No special measures required.*

6 Accidental release measures

· **Person-related safety precautions:** *Not required.*

· **Measures for environmental protection:** *Do not allow to enter drainage system, surface or ground water.*

· **Measures for cleaning/collecting:** *Collect mechanically.*

· **Additional information:** *No dangerous materials are released.*

GB

(Contd. on page 2)

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002

Reviewed on 04.04.2002

Product name: Chlorine Content DPD No.1

(Contd. of page 1)

7 Handling and storage

- **Handling**
- **Information for safe handling:** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Storage class**
- **Class according to regulation on inflammable liquids:** Void

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components 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 that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to general rules for handling chemicals.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Eye protection:** Not required.

9 Physical and chemical properties:

- | | |
|--|------------------------------|
| · Form: | Tablets |
| · Colour: | White |
| · Odour: | Odourless |
| · Melting point/Melting range: | Not determined |
| · Boiling point/Boiling range: | 300°C |
| · Flash point: | Not applicable |
| · Self-inflammability: | Product is not selfigniting. |
| · Danger of explosion: | Product is not explosive. |
| · Vapour pressure at 20°C: | 2.7 hPa |
| · Density | Not determined |
| · Solubility in / Miscibility with Water: | Soluble |
| · pH-value at 20°C: | 6.3 |
| · Solvent content: | |
| · Organic solvents: | 0.0 % |
| · Solids content: | 100.0 % |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known

(Contd. on page 3)

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002

Reviewed on 04.04.2002

Product name: Chlorine Content DPD No.1

(Contd. of page 2)

 · **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

 · **Acute toxicity:**

 · **LD/LC50 values that are relevant for classification:**
10043-35-3 boric acid, crude natural, containing not more than 85 per cent of H3BO3 calculated on the dry weight

Oral	LD50	2660 mg/kg (rat)
------	------	------------------

Dermal	LD50	> 2000 mg/kg (rat)
--------	------	--------------------

7778-77-0 potassium dihydrogenorthophosphate

Oral	LD50	7100 mg/kg (rat)
------	------	------------------

144-55-8 sodium hydrogencarbonate

Oral	LD50	4220 mg/kg (rat)
------	------	------------------

 · **Primary irritant effect:**

 · **on the skin:** No irritant effect.

 · **on the eye:** No irritant effect.

 · **Sensitization:** No sensitizing effect known.

 · **Additional toxicological information:**

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

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 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 bodies or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

13 Disposal considerations

 · **Product:**

 · **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to disposers of hazardous waste.

 · **Uncleaned packagings:**

 · **Recommendation:** Disposal must be made according to official regulations.

 · **Recommended cleaning agent:** Water, if necessary with cleaning agent.

14 Transport information

 · **Land transport ADR/RID (cross-border)**

 · **ADR/RID-GGVS/E Class:** -

 · **Maritime transport IMDG:**

 · **IMDG Class:** -

 · **Marine pollutant:** No

(Contd. on page 4)

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002

Reviewed on 04.04.2002

Product name: Chlorine Content DPD No.1

(Contd. of page 3)

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

15 Regulatory information

- **Designation according to EC guidelines:**
Observe the normal safety regulations when handling chemicals
The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).
- **National regulations**
- **Classification according to VbF:** Void
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing data specification sheet:** Environment protection department.
- **Contact:** Dr. Robert Münzberg or in Australia Michael Fatouris on the Medos contact details above

GB

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002

Reviewed on 20.02.2002

1 Identification of substance:

· **Product details:**

· **Product name:** *Chlorine Residue DPD No. 3*

· **Catalog number:** 00511089

· **Supplier:**

In Vitro Technologies P/L

7-9 Summit Road

Noble Park, Vic 3174

Ph 03 9771 3700 fax: 03 9771 3720 email: info@invitro.com.au www.invitro.com.au

· **Emergency information:**

Poisons Information Centre 131126

2 Composition/Data on components:

· **Chemical characterization**

· **Description:** *Mixture consisting of the following components.*

· **Dangerous components:** *Void*

3 Hazards identification

· **Hazard designation:** *Non Hazardous according to Worksafe Australia*

· **Information pertaining to particular dangers for man and environment void**

· **Classification system**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

4 First aid measures

· **General information** *No special measures required.*

· **After inhalation** *Supply fresh air; consult doctor in case of symptoms.*

· **After skin contact** *The product is not skin irritating.*

· **After eye contact** *Rinse opened eye for several minutes under running water.*

· **After swallowing** *In case of persistent symptoms consult doctor.*

5 Fire fighting measures

· **Suitable extinguishing agents**

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

· **Protective equipment:** *No special measures required.*

6 Accidental release measures

· **Person-related safety precautions:** *Not required.*

· **Measures for environmental protection:** *Do not allow to enter drainage system, surface or ground water.*

· **Measures for cleaning/collecting:** *Collect mechanically.*

· **Additional information:** *No dangerous materials are released.*

7 Handling and storage

· **Handling**

· **Information for safe handling:** *No special measures required.*

(Contd. on page 2)

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002

Reviewed on 20.02.2002

Product name: Chlorine Residue DPD No. 3

(Contd. of page 1)

- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Storage class**
- **Class according to regulation on inflammable liquids:** Void

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components 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 that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to general rules for handling chemicals.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Eye protection:** Not required.

9 Physical and chemical properties:

- | | |
|--|------------------------------|
| · Form: | Tablets |
| · Colour: | White |
| · Odour: | Odourless |
| · Melting point/Melting range: | Not determined |
| · Boiling point/Boiling range: | 1330°C |
| · Flash point: | Not applicable |
| · Self-inflammability: | Product is not selfigniting. |
| · Danger of explosion: | Product is not explosive. |
| · Density at 20°C | 2.160 g/cm ³ |
| · Solubility in / Miscibility with Water: | Soluble |
| · pH-value at 20°C: | 6.4 |
| · Solvent content: | |
| Organic solvents: | 0.0 % |
| · Solids content: | 100.0 % |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

GB

(Contd. on page 3)

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002

Reviewed on 20.02.2002

Product name: Chlorine Residue DPD No. 3

(Contd. of page 2)

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

7447-40-7 potassium chloride

Oral	LD50	2600 mg/kg (rat)
------	------	------------------

7681-11-0 potassium iodide

Oral	LD50	2779 mg/kg (rat)
------	------	------------------

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No irritant effect.

· **Sensitization:** No sensitizing effect known.

· **Additional toxicological information:**

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

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 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 bodies or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

13 Disposal considerations

· **Product:**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to disposers of hazardous waste.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleaning agent:** Water, if necessary with cleaning agent.

14 Transport information

· **Land transport ADR/RID (cross-border)**

· **ADR/RID-GGVS/E Class:** -

· **Maritime transport IMDG:**

· **IMDG Class:** -

· **Marine pollutant:** No

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** -

15 Regulatory information

· **Designation according to EC guidelines:**

Observe the normal safety regulations when handling chemicals

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

(Contd. on page 4)

Material Safety Data Sheet
According to 91/155 EC

Printing date 15.05.2002

Reviewed on 20.02.2002

Product name: Chlorine Residue DPD No. 3

(Contd. of page 3)

- **National regulations**
- **Classification according to VbF: Void**
- **Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.**

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing data specification sheet: Environment protection department in Germany.**
- **Contact: In Australia Contact Michael Fatouris on the above numbers**

-GB-

SAFETY DATA SHEET SURGIDROP

Non Hazardous According to Worksafe Australia

BTB REAGENT

Page 1

Issued: 11/10/03

Revision No: 2

Watertest Systems Pty Ltd **In Vitro Technologies Pty. Ltd.**
45 Junction Road **7-9 Summit Rd**
Summer Hill NSW 2130 **Noble Park Nth, Vic 3174**
Tel: +61 (2) 9798 5451 **61 3 9771 3700**
Fax: +61 (2) 9799 6503 **61 3 9771 3720**

info@invitro.com.au

www.invitro.com.au

Poisons Information Number 131126

UN No. : Nil

Dangerous Goods Class: Nil

Subsidiary Risk: Nil

Hazchem Code: Nil

Poisons Schedule: Nil

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name: BTB REAGENT

Product code: 45164-30

Use / description of product: No Significant Hazard. Liquid.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient 1: RAW BROMOTHYMOL BLUE <10%

CAS: 32722-90-2

EINECS: 252-169-7

3. HAZARDS IDENTIFICATION

Main hazards: No significant hazard.

4. FIRST AID MEASURES (SYMPTOMS)

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be soreness and redness of the mouth and throat.

4. FIRST AID MEASURES (ACTION)

Skin contact: Drench the affected skin with running water for 10 minutes or longer if substance is still on skin.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: If conscious, give 1 pint of water to drink immediately. Transfer to hospital as soon as possible.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Water.

Protection of fire-fighters: Wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Refer to section 8 of SDS for personal protection details.

Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water.

7. HANDLING AND STORAGE

Handling requirements: Avoid direct contact with the substance.

Storage conditions: Store in cool, well ventilated area. Keep away from direct sunlight.

[cont...]

SAFETY DATA SHEET

BROMOTHYMOL BLUE INDICATOR

Page 2 Issued: 11/10/03

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Hand protection: Protective gloves.

Eye protection: Safety goggles.

Skin protection: Protective clothing with elasticated cuffs and closed neck.

9. PHYSICAL AND CHEMICAL PROPERTIES

State: Liquid

Colour: Red/Orange

Odour: Odourless

Oxidising: Non-oxidising

Solubility in water: Soluble

Boiling point/range°C: Decomposes > 150

pH: 6-8

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to avoid: Direct sunlight. Heat.

Haz. decomp. products: In combustion emits toxic fumes.

11. TOXICOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION

Mobility: Soluble in water.

Persistence and degradability: Biodegradable.

Bioaccumulative potential: No bioaccumulation potential.

Other adverse effects: Negligible ecotoxicity.

13. DISPOSAL CONSIDERATIONS

Waste disposal: Dispose of as normal industrial waste.

Disposal of packaging Dispose of as normal industrial waste.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION

ADR / RID

IMDG / IMO

IATA / ICAO

15. REGULATORY INFORMATION

Hazard symbols: No significant hazard.

Safety phrases: S2: Keep out of the reach of children.

S24/25: Avoid contact with skin and eyes.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete

[cont...]

SAFETY DATA SHEET

BROMOTHYMOL BLUE INDICATOR

Page 3 Issued: 11/10/03

these regulations. Refer to all applicable national, international and local regulations or provisions.

16. ADDITIONAL INFORMATION

Legal disclaimer: Information given herein is offered in good faith as accurate, but without guarantee.

Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user. We expressly disclaim all warranties of every kind and nature, including warranties of merchantability and fitness for a particular purpose in respect to the use or suitability of the product.

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[final page]

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002 Reviewed on 03.05.2002

State of Hazardous Nature:

1 Identification of substance:

- **Product details:** Water Hardness Test
- **Product name:** Total Hardness
- **Catalog number:** 00515169
- **Supplier:**

Tintometer GmbH
Schleefstr. 8 a
44287 Dortmund

In Vitro Technologies
7-9 Summit Road
Noble Park Nth, Vic 3174
ph 03 9771 3700
Fax 03 9771 3720
www.invitro.com.au
info@invitro.com.au

Poisons Information Number 131126

2 Composition/Data on components:

- **Chemical characterization**
- **Description:** Mixture consisting of the following components.
- **Dangerous components:**
CAS: 6381-92-6
EINECS Number: 205-358-3
Ethylenediamine tetraacetic acid 5-10%
CAS: 1310-65-2
EINECS Number: 215-183-4
lithium hydroxide C; R 35 5-10%

3 Hazards identification:

Classified as hazardous by the criteria of NOHSC

- **Hazard designation:**
C Corrosive
- **Information pertaining to particular dangers for man and environment**
R 34 Causes burns.
- **Classification system**
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

4 First aid measures

- **General information** Instantly remove any clothing soiled by the product.
- **After inhalation** In case of unconsciousness bring patient into stable side position for transport.
- **After skin contact**
Instantly wash with water and soap and rinse thoroughly.
Instantly rinse with water.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.

· **After swallowing** Drink copious amounts of water and provide fresh air. Instantly call for doctor.
Poisons info center 131126.

5 Fire fighting measures

· **Suitable extinguishing agents**

CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

· **Protective equipment:** No special measures required.

GB

(Contd. on page 2)

Page 2/5

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002 Reviewed on 03.05.2002

Product name: Total Hardness

(Contd. of page 1)

6 Accidental release measures

· **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

· **Measures for environmental protection:** Do not allow to enter drainage system, surface or ground water.

· **Measures for cleaning/collecting:**

Use neutralizing agent.

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

7 Handling and storage

· **Handling**

· **Information for safe handling:** Thorough dedusting.

· **Information about protection against explosions and fires:** No special measures required.

· **Storage**

· **Requirements to be met by storerooms and containers:** No special requirements.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** Keep container tightly sealed.

· **Storage class**

· **Class according to regulation on inflammable liquids:** Void

8 Exposure controls and personal protection

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

· **Components with limit values that require monitoring at the workplace:**

9004-34-6 Cellulose (50-60%)

OES Short-term value: 20 mg/m³

Long-term value: 10* 4** mg/m³

*total inhalable dust **respirable dust

1310-65-2 lithium hydroxide (5-10%)

OES Short-term value: 1 mg/m³

ILV

· **Additional information:** The lists that were valid during the compilation were used as basis.

· **Personal protective equipment**

· **General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.

Take off immediately all contaminated clothing

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

· **Breathing equipment:** Not required.

· **Protection of hands:** Protective gloves.

· **Eye protection:** Tightly sealed safety glasses.

9 Physical and chemical properties:

- **Form:** Tablets
- **Colour:** Grey
- **Odour:** Odourless
- **Melting point/Melting range:** Not determined
- **Boiling point/Boiling range:** 300°C
- **Flash point:** Not applicable
- **Ignition temperature:** 340.0°C

(Contd. on page 3)

GB

Page 3/5

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002 Reviewed on 03.05.2002

Product name: Total Hardness

(Contd. of page 2)

- **Self-inflammability:** Product is not selfigniting.
- **Danger of explosion:** Product is not explosive.
- **Vapour pressure at 20°C:** 2.7 hPa
- **Density** Not determined
- **Solubility in / Miscibility with**
Water: Soluble
- **pH-value at 20°C:** 9
- **Solvent content:**
Organic solvents: 0.0 %
- **Solids content:** 100.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

9004-34-6 Cellulose

Oral LD50 > 5000 mg/kg (rat)

Dermal LD50 > 2000 mg/kg (rabbit)

10043-35-3 boric acid, crude natural, containing not more than 85 per cent of H3BO3 calculated on the dry weight

Oral LD50 2660 mg/kg (rat)

Dermal LD50 > 2000 mg/kg (rat)

6381-92-6 Ethylenediamine tetraacetic acid

Oral LD50 > 2000 mg/kg (rat)

1310-65-2 lithium hydroxide

Oral LD50 225 mg/kg (rat)

- **Primary irritant effect:**
· **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effect known.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information:

· General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water bodies or sewage system.

(Contd. on page 4)

GB

Page 4/5

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002 Reviewed on 03.05.2002

Product name: Total Hardness

(Contd. of page 3)

Danger to drinking water if even small quantities leak into soil.

13 Disposal considerations

· Product:

· Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Hand over to disposers of hazardous waste.

· Uncleaned packagings:

· Recommendation: *Disposal must be made according to official regulations.*

· Recommended cleaning agent: *Water, if necessary with cleaning agent.*

14 Transport information

· Land transport ADR/RID (cross-border)

· ADR/RID-GGVS/E Class: 8 (C6) *Corrosive substances.*

· Kehler Number: 80

· UN-Number: 2680

· Packaging group: II

· Label 8

· Designation of goods: 2680 LITHIUM HYDROXIDE MONOHYDRATE, mixture

· Maritime transport IMDG:

· IMDG Class: 8

· UN Number: 2680

· Label 8

· Packaging group: II

· EMS Number: 8-15

· Marine pollutant: No

· Correct technical name: LITHIUM HYDROXIDE MONOHYDRATE, mixture

· Air transport ICAO-TI and IATA-DGR:

· ICAO/IATA Class: 8

· UN/ID Number: 2680

· Label 8

· Packaging group: II

Hazchem Code: 2R

· Correct technical name: LITHIUM HYDROXIDE MONOHYDRATE, mixture

*** 15 Regulatory information**

· Designation according to EC guidelines:

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous

Materials (GefStoffV)

(Contd. on page 5)

GB

Page 5/5

Material Safety Data Sheet

According to 91/155 EC

Printing date 15.05.2002 Reviewed on 03.05.2002

Product name: Total Hardness

(Contd. of page 4)

· **Code letter and hazard designation of product:**

C Corrosive

· **Hazard-determining components of labelling:**

lithium hydroxide

· **Risk phrases:**

34 Causes burns.

· **Safety phrases:**

1/2 Keep locked up and out of the reach of children.

20 When using do not eat or drink.

25 Avoid contact with eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

27/28 After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

· **National regulations**

· **Classification according to VbF: Void**

· **Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.**

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing data specification sheet: Environment protection department.**

· **Contact: Dr. Robert Münzberg**

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