


Material Safety Data Sheet

United States
English

Section 1. Chemical product and company identification

Product name	Detection Reagent 1; part of 'ECL™ Western Blotting Detection Reagents, for 4,000 cm² membrane'		
Catalogue Number	RPN2106		9 0 R P N 2 1 0 6
Component Number	RPN2106V1		
Material uses	Industrial applications: Analytical chemistry. Research.		
Validation date	8 August 2006		
Print date	08 August 2006		
Supplier	GE Healthcare Bio-Sciences AB SE-751 84 Uppsala Sweden +46 (0)18 612 0000		
<u>In case of emergency</u>	US	ChemTrec (US)	1-800-424-9300
	Canada	ChemTrec (US)	1-703-527-3887

2. Hazards identification

Physical state	Liquid.
Odor	Odorless.
OSHA/HCS status	<input checked="" type="checkbox"/> While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Emergency overview	No specific hazard.
<u>Potential acute health effects</u>	
Eyes	No known significant effects or critical hazards.
Skin	No known significant effects or critical hazards.
Inhalation	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.
Potential chronic health effects	CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available.

See toxicological information (section 11)

3. Composition/information on ingredients

Section 4. First aid measures

Eye contact	<input checked="" type="checkbox"/> Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Skin contact	<input checked="" type="checkbox"/> Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Inhalation	<input checked="" type="checkbox"/> Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.



Article Number

25006262-1



9 5 2 5 0 0 6 2 6 2 - 1

Page: 1/4

Validation date 8 August 2006

Version 3

Ingestion	Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

Section 5. Fire fighting measures

Flammability of the product	Non-flammable.
Extinguishing media	
Suitable	Use an extinguishing agent suitable for the surrounding fire.
Not suitable	None known.
Special exposure hazards	No specific hazard.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Methods for cleaning up	If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

Section 7. Handling and storage

Handling	Wash thoroughly after handling.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure controls, personal protection

Engineering measures	No special ventilation requirements. Good general ventilation should be sufficient to control airborne levels. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
Personal protection	
Eyes	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hands	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Consult local authorities for acceptable exposure limits.	

Section 9. Physical and chemical properties

Physical state	Liquid.
Color	Colorless.
Odor	Odorless.
Boiling/condensation point	The lowest known value is 100°C (212°F) (water).
Melting/freezing point	May start to solidify at 0°C (32°F) based on data for: water.
Critical temperature	The lowest known value is 374.3°C (705.7°F) (water).
Vapor pressure	The highest known value is 3.2 kPa (23.8 mm Hg) (at 20°C) (water).
Volatility	0% (v/v)
Evaporation rate	0.36 (water) compared with Butyl acetate.



VOC	0 (g/l).
Dispersibility properties	See solubility in water, methanol, acetone.
Solubility	Easily soluble in cold water, hot water, methanol, acetone. Very slightly soluble in diethyl ether.

Section 10. Stability and reactivity

Stability and reactivity	The product is stable.
Incompatibility with various substances	<input checked="" type="checkbox"/> Non-reactive or compatible with the following materials: oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.
Hazardous polymerization	Will not occur.
Conditions of reactivity	<input checked="" type="checkbox"/> Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture. <input checked="" type="checkbox"/> Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.

Section 11. Toxicological information

Other toxic effects on humans	<input checked="" type="checkbox"/> No specific information is available in our database regarding the other toxic effects of this material to humans.
Special remarks on chronic effects on humans	No additional remark.
Specific effects	
Carcinogenic effects	No known significant effects or critical hazards.
Mutagenic effects	No known significant effects or critical hazards.
Teratogenicity / Reproduction toxicity	No known significant effects or critical hazards.
Sensitization	
Ingestion	<input checked="" type="checkbox"/> No known significant effects or critical hazards.
Inhalation	<input checked="" type="checkbox"/> No known significant effects or critical hazards.
Eyes	No known significant effects or critical hazards.
Skin	<input checked="" type="checkbox"/> No known significant effects or critical hazards.

Section 12. Ecological information

Environmental precautions	No known significant effects or critical hazards.
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Section 13. Disposal considerations

Waste disposal	<input checked="" type="checkbox"/> The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
RCRA classification	Code: Not classified

Consult your local or regional authorities.

Section 14. Transport information

International transport regulations

Not classified.

Section 15. Regulatory information

HCS Classification	Not regulated.
U.S. Federal regulations	<input checked="" type="checkbox"/> SCA 8(b) inventory: boric acid; Sodium hydroxide; Magnesium nitrate; Magnesium chloride; 3(2h)-isothiazolone, 2-methyl-; 5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one; water TSCA 8(d) H and S data reporting: 5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found. Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: Sodium hydroxide Clean Air Act (CAA) 112 accidental release prevention: No products were found. Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found.



State regulations

Pennsylvania RTK: Sodium hydroxide; (environmental hazard, generic environmental hazard); Magnesium nitrate; (generic environmental hazard)
Florida: Sodium hydroxide
Minnesota: Sodium hydroxide
Massachusetts RTK: Sodium hydroxide; Magnesium nitrate
New Jersey: Sodium hydroxide; Magnesium nitrate

EU regulations**Risk phrases**

☑ This product is not classified according to EU legislation.

International regulations**International lists**

☑ Australia: Magnesium chloride

Australia (NICNAS): boric acid; Sodium hydroxide; Magnesium nitrate; Magnesium chloride; 3(2h)-isothiazolone, 2-methyl-; 5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one; water; sodium perborate, trihydrate

China: boric acid; Sodium hydroxide; Magnesium nitrate; Magnesium chloride; 3(2h)-isothiazolone, 2-methyl-; 5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one; water; sodium perborate, trihydrate

Germany water class: boric acid; Sodium hydroxide; Magnesium nitrate; Magnesium chloride; 5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one

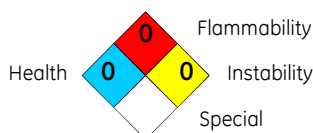
Japan (METI): boric acid; Sodium hydroxide; Magnesium nitrate; Magnesium chloride; 3(2h)-isothiazolone, 2-methyl-; 5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one; water

Korea (TCCL): boric acid; Sodium hydroxide; Magnesium nitrate; Magnesium chloride; 3(2h)-isothiazolone, 2-methyl-; 5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one; water

Philippines (RA6969): boric acid; Sodium hydroxide; Magnesium nitrate; Magnesium chloride; 3(2h)-isothiazolone, 2-methyl-; 5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one; water

Section 16. Other information**Hazardous Material Information System (U.S.A.)**

Health	0
Fire hazard	0
Reactivity	0
Personal protection	B

National Fire Protection Association (U.S.A.)

Indicates information that has changed from previously issued version.

History

Date of printing	08 August 2006	Date of previous issue	31 October 2005
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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

