Material Safety Data Sheet

Australia English

1. Identification of the material and supplier

Product name

Biotinylated Antibody Reagent; part of 'VEGF,

Human, Biotrak™ Assay, 96 wells'

Catalogue Number RPN2779

Component Number RPN2779AS

Company details

Manufacturer Supplier

GE Healthcare UK Ltd GE Healthcare Bio-Sciences
Amersham Place Building 4B, Parklands Estate
Little Chalfont 21 South Street
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ADG -

<u>Uses</u>

Area of application Material uses Analytical chemistry. Research.

Product type

Risk phrases R22- Harmful if swallowed.

Statement of hazardous/dangerous nature

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

3. Composition/information on ingredients

Mixture Yes

Ingredient nameCAS numberConcentrationSodium azide26628-22-80.1

<u>Additional information</u>

Other ingredients, determined not to be hazardous according to NOHSC criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

4. First-aid measures

First-aid measures

Inhalation

Eye contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for

and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if

irritation occurs.

Skin contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Obtain medical

attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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 adverse health effects persist or are severe. 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.

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Ingestion

 $\overline{\mathbb{W}}$ ash 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. 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

 \sqrt{N} o action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Fire-fighting measures

Extinguishing media

Use an extinguishing agent suitable for the surrounding fire. Suitable

None known. Not suitable

Special exposure hazards Fromptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No

action shall be taken involving any personal risk or without suitable training. n a fire or if heated, a pressure increase will occur and the container may burst.

Special protective equipment for

fire-fighters

Hazardous combustion products

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

No specific data.

6. Accidental release measures

Personal precautions

areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8). Kvoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local

 $\overline{\mathsf{N}}$ o action shall be taken involving any personal risk or without suitable training. Evacuate surrounding

Environmental precautions Methods for cleaning up

regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency

contact information and section 13 for waste disposal.

Small spill Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or

absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling

Fut on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can

be hazardous. Do not reuse container.

Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name Sodium azide

Occupational exposure limits NOHSC (Australia, 8/2005). PEAK: 0.3 mg/m3 15 minute(s). PEAK: 0.11 ppm 15 minute(s).

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. 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.

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.

Personal protection



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Safety eyewear complying with an approved standard should be used when a risk assessment indicates Eyes

this is necessary to avoid exposure to liquid splashes, mists or dusts.

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.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk Respiratory 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. 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.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the Environmental exposure controls

requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable

levels

9. Physical and chemical properties

Liquid Physical state Colour Colourless Odour Odourless.

Solubility Easily soluble in the following materials: cold water and hot water.

10. Stability and reactivity

The product is stable. Stability No specific data. Conditions to avoid

Toxicological information 11.

Potential acute health effects

No known significant effects or critical hazards. Inhalation

Ingestion Harmful if swallowed.

Skin contact No known significant effects or critical hazards. No known significant effects or critical hazards. Eye contact

Acute toxicity

Skin

Product/ingredient name	Result	Species	Dose	Exposure
Sodium azide	LD50 Dermal	Rat	50 mg/kg	-
	LD50 Dermal	Rabbit	20 mg/kg	-
	LD50 Intratracheal	Rat	47.5 mg/kg	-
	LD50 Intratracheal	Rat	47500 ug/kg	-
	LD50 Oral	Rat	27 mg/kg	-
	LD50 Subcutaneous	Rat	45100 ug/kg	-
	LD50 Subcutaneous	Rat	45 mg/kg	-
	LDLo Intraperitoneal	Rat	3 mg/kg	-
	LDLo Intraperitoneal	Rat	30 ma/ka	_

Not available Conclusion/Summary

Potential chronic health effects

Chronic toxicity

Not available. Conclusion/Summary

Carcinogenicity

Conclusion/Summary Not available.

Mutagenicity

Not available. Conclusion/Summary

Teratogenicity

Not available. Conclusion/Summary

Reproductive toxicity

Not available. Conclusion/Summary

No known significant effects or critical hazards. Chronic effects No known significant effects or critical hazards. Carcinogenicity No known significant effects or critical hazards. Mutagenicity No known significant effects or critical hazards. **Teratogenicity** No known significant effects or critical hazards. **Developmental effects** No known significant effects or critical hazards. Fertility effects

Over-exposure signs/symptoms

No specific data. Inhalation No specific data. Ingestion Skin



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Eyes

No specific data.

12. Ecological information

Environmental effects

No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure		
sodium azide	-	Acute EC50 6.4 to 8.9 mg/L Fresh water	Crustaceans - Water flea - Simocephalus serrulatus - LARVAE	48 hours		
	-	Acute EC50 4.2 to 6.2 mg/L Fresh water	Daphnia - Water flea - Daphnia pulex - LARVAE	48 hours		
	-	Acute LC50 0.8 mg/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 1.4 g	96 hours		
	-	Acute LC50 0.68 mg/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 0.6 q	96 hours		
	-	Acute LC50 5460 to 5870 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 30 days - 18.8 mm - 0.098 g	96 hours		
	-	Acute LC50 3920 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 8.57 cm - 7.84 q	96 hours		
	-	Acute LC50 2840 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 7.87 cm - 6.07 g	96 hours		
	-	Acute LC50 2750 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 7.32 cm - 4.76 q	96 hours		
Conclusion/Summary	Not available.		3			
Biodegradability Conclusion/Summary	Not available.					
Other adverse effects	No known significant effects or critical hazards.					

13. Disposal considerations

Methods of disposal

The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

International transport regulations

Not classified.

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15. Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons

Not regulated.

Control of Scheduled Carcinogenic Substances

Ingredient name Schedule

Not available.

Australia inventory (AICS) Australia inventory (AICS)

EU ClassificationXn; R22HCS ClassificationNot regulated.

16. Other information

History

Date of printing08 July 2009Date of previous issue04 July 2006

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Indicates information that has changed from previously issued version.

Enquiries regarding MSDS content should be directed to: our local sales office.

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.



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