# **Material Safety Data Sheet**

United States English

Section 1. Chemical product and company identification

Product name Streptavidin-HRP Dilution Buffer; part of 'IL-1β,

Rat, Biotrak™ Assay'

Catalogue Number RPN2743

9 O R P N 2 7 4 3

Component Number NIF1656

Material uses Industrial applications: Analytical chemistry. Research.

Product typeLiquid.Validation date7 June 2011Print date07 June 2011SupplierGE Healthcare UK Ltd

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<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 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** 

NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED

INSTRUCTIONS FOR USE ARE FOLLOWED.

**Routes of entry** Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

EyesNo known significant effects or critical hazards.SkinNo known significant effects or critical hazards.InhalationNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.

Potential chronic health effects

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
 No known significant effects or critical hazards.

InhalationNo specific data.IngestionNo specific data.SkinNo specific data.EyesNo specific data.Medical conditions aggravated byNone known.

over-exposure



Article Number Page: 1/5

20-5 Validation date 7 June 2011



#### 3. Composition/information on ingredients

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

#### Section 4. First aid measures

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 Eye contact

minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur. Skin contact In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing

contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get

medical attention if symptoms occur.

Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, Inhalation

provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt

or waistband. Get medical attention if symptoms occur.

 $Wash\ out\ mouth\ with\ water.\ Do\ not\ induce\ vomiting\ unless\ directed\ to\ do\ so\ by\ medical\ personnel.\ Never$ Ingestion

give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

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 In a fire or if heated, a pressure increase will occur and the container may burst.

**Extinguishing media** 

Suitable Use an extinguishing agent suitable for the surrounding fire.

Not suitable None known.

Special exposure hazards Promptly 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.

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 No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding

areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled

material. Put on appropriate personal protective equipment (see Section 8).

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform **Environmental precautions** 

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. Prevent entry into sewers, water courses, Methods for cleaning up

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 regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information

and section 13 for waste disposal.

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

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

licensed waste disposal contractor.

#### Section 7. Handling and storage

Handling Put 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.

Store in accordance with local regulations. Store in original container protected from direct sunlight in a Storage

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 unlabeled containers. Use

appropriate containment to avoid environmental contamination.



Article Number





# Section 8. Exposure controls/personal protection

#### Consult local authorities for acceptable exposure limits.

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

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.

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.

Safety eyewear complying with an approved standard should be used when a risk assessment indicates Eves this is necessary to avoid exposure to liquid splashes, mists or dusts.

Personal protective equipment for the body should be selected based on the task being performed and the

Skin risks involved and should be approved by a specialist before handling this product.

**Environmental exposure** 

controls

Hands

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

# Section 9. Physical and chemical properties

Physical state Liquid. Color Colorless. Odorless Odor 0% (v/v) Volatility  $O(\alpha/I)$ VOC

Easily dispersible in the following materials: cold water and hot water. Dispersibility properties

Solubility Physical/chemical properties

comments

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

Properties very similar to that of water.

### Section 10. Stability and reactivity

The product is stable. Stability

Conditions of reactivity 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.

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

Sensitizer

Not available. Conclusion/Summary

# Section 12. Ecological information

No known significant effects or critical hazards. **Environmental effects** 

**Aquatic ecotoxicity** 

Not available. Conclusion/Summary

Biodegradability

Not available Conclusion/Summary

No known significant effects or critical hazards. Other adverse effects



Article Number

# Section 13. Disposal considerations

Waste disposal

The generation of waste should be avoided or minimized 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

# Section 14. Transport information

#### International transport regulations

Not classified.

# Section 15. Regulatory information

**HCS Classification** 

Not regulated.

U.S. Federal regulations

United States inventory (TSCA 8b): Not determined.

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: 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.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I

**Substances** 

Clean Air Act Section 602 Class II

Substances

**DEA List I Chemicals (Precursor** 

Chemicals)

**DEA List II Chemicals (Essential** 

Chemicals)

### State regulations

California Prop. 65

United States inventory (TSCA 8b)

Not determined.

International regulations

International lists Australia inventory (AICS): Not determined.

China inventory (IECSC): Not determined. Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined. Korea inventory (KECI): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined.

Chemical Weapons Convention List Schedule I Chemicals

Chemical Weapons Convention List Schedule II Chemicals



Article Number 25800120-5



Chemical Weapons Convention List Schedule III Chemicals

#### Section 16. Other information

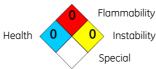
Label requirements

NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED

INSTRUCTIONS FOR USE ARE FOLLOWED.

The customer is responsible for determining the PPE code for this material.

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





Indicates information that has changed from previously issued version.

#### **History**

Date of printing07 June 2011Date of previous issueNo previous validation

**Date of issue** 07 June 2011 **Version** 

#### 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.



25800120-5

Article Number