Material Safety Data Sheet

United States English

Section 1. Chemical product and company identification

Product name AMDEX; part of 'IL-10, Human - High-Sensitivity,

Biotrak™ Assay'

Catalogue Number RPN2785

Component Number NIF1242

Material uses Industrial applications: Analytical chemistry. Research.

Product typeSolid.Validation date8 July 2009Print date08 July 2009

Supplier GE Healthcare UK Ltd

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England

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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 stateSolid.OdorOdorless.

OSHA/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview WARNING!

CAUSES EYE AND SKIN IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. CONTAINS MATERIAL

THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Prritating to eyes and skin. Moderately irritating to the respiratory system. Avoid contact with eyes, skin and clothing. Contains material that may cause target organ damage, based on animal data. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Eyes Irritating to eyes.
Skin Irritating to skin.

Inhalation Moderately irritating to the respiratory system. Exposure to decomposition products may cause a health

hazard. Serious effects may be delayed following exposure.

Ingestion No known significant effects or critical hazards.

Potential chronic health effects

Chronic effects Contains material that may cause target organ damage, based on animal data.

CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

Target organs Contains material which may cause damage to the following organs: upper respiratory tract, eye, lens or

cornea.

Inhalation Adverse symptoms may include the following:

respiratory tract irritation

coughing

Ingestion No specific data.



Article Number Page: 1/6

06537-8 Validation date 8 July 2009



Skin Adverse symptoms may include the following:

irritation redness

Eyes Adverse symptoms may include the following:

pain or irritation watering redness

Medical conditions aggravated by

over-exposure

Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be

aggravated by over-exposure to this product.

See toxicological information (section 11)

3. Composition/information on ingredients

| <u>Name</u> | CAS number | % by weight |
|---|------------|-------------|
| sucrose | 57-50-1 | 10.62 |
| Glycine, N,N'-1,2-ethanedlylbis[N-(carboxymethyl), disodium salt, | 6381-92-6 | 1.86 |
| dihydrate | | |
| ammonium iron(ii) sulfate (2:1:2) | 7783-85-9 | 1.59 |
| | | |

Section 4. First aid measures

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

minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

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 immediately.

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

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

or waistband. Get medical attention immediately.

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

give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of first-aidersNo 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.

Section 5. Fire fighting measures

Flammability of the product No specific fire or explosion hazard.

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

Methods for cleaning up

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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on

appropriate personal protective equipment (see section 8).

Environmental precautions Avoid dispersal of spilled 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).

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact

information and section 13 for waste disposal.

Small spill Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste

container. Dispose of via a licensed waste disposal contractor.

Section 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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.



Article Number

Page: 2/6

7-8 Validation date 8 July 2009

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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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Product name

sucrose

Exposure limits

ACGIH TLV (United States, 1/2007). Notes: 1996 Adoption Refers to Appendix A --

Carcinogens.

TWA: 10 mg/m³ 8 hour(s).

OSHA PEL 1989 (United States, 3/1989).

TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction TWA: 15 mg/m³ 8 hour(s). Form: Total dust

NIOSH REL (United States, 12/2001).

TWA: 5 mg/m³ 10 hour(s). Form: Respirable fraction

TWA: 10 mg/m³ 10 hour(s). Form: Total OSHA PEL (United States, 11/2006).

TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction TWA: 15 mg/m³ 8 hour(s). Form: Total dust

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 measuresUse only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process

enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne

contaminants 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

RespiratoryUse 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.

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 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.

Environmental exposure

controls

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 Solid

 Color
 Reddish-white.

 Odor
 Odorless.

 Volatility
 0% (w/w)

 VOC
 0 (g/l).

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

Section 10. Stability and reactivity

StabilityThe product is stable.Materials to avoidNo specific data.

Hazardous polymerization Under normal conditions of storage and use, hazardous polymerization will not occur.

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.



Article Number

Page: 3/6

Validation date 8 July 2009

Section 11. Toxicological information

Acute toxicity

Product/ingredient nameResultSpeciesDoseExposuresucroseLD50 OralRat29700 mg/kg-ammonium iron(ii) sulfate (2:1:2)LD50 OralRat3250 mg/kg-

Conclusion/Summary Not available.

Classification

 Product/ingredient name
 ACGIH
 IARC
 EPA
 NIOSH
 NTP
 OSHA

 sucrose
 A4

Section 12. Ecological information

Environmental effects No known significant effects or critical hazards.

Aquatic ecotoxicity

Conclusion/Summary Not available

Biodegradability

Conclusion/Summary Not available

Other adverse effects No known significant effects or critical hazards.

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.

RCRA classification Not classified

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.

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Section 15. Regulatory information

HCS Classification Irritating material

Target organ effects

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: sucrose

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: sucrose: Delayed (chronic)

health hazard

Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.

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.



Article Number 25006537-8



State regulations

Connecticut Carcinogen Reporting: None of the components are listed.

Connecticut Hazardous Material Survey: None of the components are listed.

Florida substances: None of the components are listed.

Illinois Chemical Safety Act: None of the components are listed.

Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.

Louisiana Reporting: None of the components are listed.
Louisiana Spill: None of the components are listed.
Massachusetts Spill: None of the components are listed.

Massachusetts Substances: The following components are listed: SUCROSE DUST

Michigan Critical Material: None of the components are listed.

Minnesota Hazardous Substances: None of the components are listed.

New Jersey Hazardous Substances: None of the components are listed.

New Jersey Spill: None of the components are listed.

New Jersey Toxic Catastrophe Prevention Act: None of the components are listed. New York Acutely Hazardous Substances: None of the components are listed. New York Toxic Chemical Release Reporting: None of the components are listed.

Pennsylvania RTK Hazardous Substances: The following components are listed: .ALPHA.-D-

GLUCOPYRANOSIDE, .BETA.-D-FRUCTOFURANOSYL

Rhode Island Hazardous Substances: None of the components are listed.

| Ingredient name | <u>Cancer</u> | <u>Reproductive</u> | No significant risk level | Maximum acceptable dosage level |
|---|---------------|---------------------|---------------------------|---------------------------------|
| Albumins, blood serum | No. | No. | No. | No. |
| Glycine, N,N'-1,2-ethanedlylbis[N- | No. | No. | No. | No. |
| (carboxymethyl), disodium salt, dihydrate | | | | |

United States inventory (TSCA 8b)

Not determined.

EU regulations

Risk phrases This product is not classified according to EU legislation.

International regulations

International lists Australia inventory (AICS): Not determined.

China inventory (IECSC): Not determined.

Japan inventory (ENCS): At least one component is not listed.

Japan inventory (ISHL): Not determined. Korea inventory (KECI): Not determined.

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

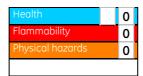
Philippines inventory (PICCS): Not determined.

Section 16. Other information

Label requirements

CAUSES EYE AND SKIN IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

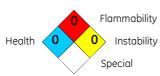
Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

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.

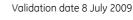
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Notice to reader



Article Number





Page: 5/6

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Article Number 25006537-8

