Material Safety Data Sheet

Canada English

Section 1. Chemical product and company identification

Product name CytoCy™5S, 0.2 mg

Catalogue Number PA76140

Material uses Industrial applications: Analytical chemistry. Research.

Product type

Validation date 16 February 2012 16 February 2012 Print date GE Healthcare UK Ltd Supplier Amersham Place

Little Chalfont

Buckinghamshire HP7 9NA England +44 0870 606 1921

US ChemTrec (US) 1-800-424-9300 In case of emergency

Canada ChemTrec (US) 1-703-527-3887

2. Hazards identification

Physical state Odorless Odor WARNING! **Emergency overview**

HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. MAY CAUSE ALLERGIC RESPIRATORY

AND SKIN REACTION.

🕏 o not ingest. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Keep Precautionary measures

container closed. Wash thoroughly after handling. Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Routes of entry

Eyes No known significant effects or critical hazards.

Skin Toxic in contact with skin. May cause sensitization by skin contact.

Inhalation Toxic by inhalation. May cause sensitization by inhalation. Exposure to decomposition products may

cause a health hazard. Serious effects may be delayed following exposure.

Ingestion Toxic if swallowed.

Potential chronic health effects

Chronic effects Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

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.

Target organs Not available.

Inhalation Adverse symptoms may include the following:

wheezing and breathing difficulties

asthma

Ingestion No specific data.

Skin Adverse symptoms may include the following:

irritation

No specific data. Eyes

Medical conditions aggravated by

over-exposure

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Pre-existing respiratory and skin disorders may be aggravated by over-exposure to this product.

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See toxicological information (Section 11)

3. Composition/information on ingredients

Name CAS number % by weight

CytoCy 5S 100 -

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. If it is suspected that

fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash

contaminated clothing thoroughly with water before removing it, or wear gloves.

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

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 precautionsNo 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 precautionsAvoid 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).

Methods for cleaning up 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. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. 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.

Storage Storage Store between the following temperatures: 2 to 8°C (35.6 to 46.4°F). 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.



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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**

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and Hygiene measures

using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to

the workstation location.

Personal protection

Hands

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.

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 Eyes 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 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 controls modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Section 9. Physical and chemical properties

Physical state

Product does not sustain combustion. Flash point

Blue Color Odorless Odor Volatility 0% (w/w)

8 (w/w) [ISO 11890-1] VOC

Solubility Easily soluble in the following materials: methanol.

Very slightly soluble in the following materials: cold water and hot water.

Section 10. Stability and reactivity

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

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions 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. Not considered to be a product presenting a risk of explosion.

Section 11. Toxicological information

Acute toxicity

Product/ingredient name Result Species Dose Exposure

Not available.

Not available Conclusion/Summary

Classification

Product/ingredient name IARC FΡΑ NIOSH **OSHA ACGIH** NTP

Not available

Not available Synergistic products



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Section 12. Ecological information

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

Partition coefficient: n-

octanol/water

Not available.

Bioconcentration factor Other adverse effects

Not available. No known significant effects or critical hazards.

Section 13. Disposal considerations

Waste disposal

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Not available. **RCRA** classification

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

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Class D-1B: Material causing immediate and serious toxic effects (Toxic). WHMIS (Canada)

CEPA Toxic substances: None of the components are listed. **Canadian lists**

Canadian ARET: None of the components are listed. Canadian NPRI: None of the components are listed.

Alberta Designated Substances: None of the components are listed. Ontario Designated Substances: None of the components are listed. Quebec Designated Substances: None of the components are listed.

Canada inventory Not determined.

International regulations

International lists Kustralia inventory (AICS): Not determined.

> China inventory (IECSC): Not determined. Japan inventory: Not determined. Korea inventory: Not determined.

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

Philippines inventory (PICCS): Not determined.

Chemical Weapons Convention

List Schedule I Chemicals

Not listed

Not listed

Chemical Weapons Convention

List Schedule II Chemicals

Chemical Weapons Convention

List Schedule III Chemicals

Not listed



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Section 16. Other information

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



Indicates information that has changed from previously issued version.

<u>History</u>

Date of printing16 February 2012Date of previous issue30 June 2009

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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.



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