

# **Safety Data Sheet**

Canada

Section 1. Identification

Cy<sup>TM</sup>7 Bis NHS ester, 50 mg

Catalogue Number 25-9004-67

Chemical name Cy7 (Bis NHS ester)

Product type Solid.

# Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Use in laboratories

Supplier Cytiva

Amersham Place Little Chalfont Buckinghamshire HP7 9NA United Kingdom +44 0800 515 313 Importer Cytiva Canada

250 Howe Street, Suite 1400-C Vancouver, British Columbia, Canada, V6C 3S7 1 800 463 5800

In case of emergency Canada ChemTrec (US) 1-703-527-3887

Section 2. Hazard identification

Classification of the substance

or mixture

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2

## **GHS label elements**

**Hazard pictograms** 



Signal word Warning

Hazard statements May cause damage to organs.

**Precautionary statements** 

**Prevention** Do not breathe dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly

after handling.

**Response** IF exposed or concerned: Call a POISON CENTER or physician.

Storage Store locked up.

Disposal Dispose of contents and container in accordance with all local, regional, national and international

regulations.



Cy™7 Bis NHS ester, 50 mg 25-9004-67

# Section 3. Composition/information on ingredients

Substance/mixture Substance

Chemical name Cy7 (Bis NHS ester) Other means of identification Not available

CAS number/other identifiers

**CAS** number Not available.

Ingredient name % (w/w) CAS number

Cy7 (Bis NHS ester) 100

There are no additional 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.

Occupational exposure limits, if available, are listed in Section 8.

#### Section 4. First-aid measures

#### Description of necessary first aid measures

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

following exposure or if feeling unwell. If necessary, call a poison center or physician.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 following exposure or if feeling unwell. If necessary, call a poison center or physician. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed

person may need to be kept under medical surveillance for 48 hours.

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

to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly

Ingestion Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in

a position comfortable for breathing. 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 following exposure or if feeling unwell. If necessary, call a poison center or physician. 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.

# Most important symptoms/effects, acute and delayed

## Potential acute health effects

Eye contact No known significant effects or critical hazards.

Inhalation May cause damage to organs following a single exposure if inhaled.

Skin contact May cause damage to organs following a single exposure in contact with skin.

Ingestion May cause damage to organs following a single exposure if swallowed.

# Over-exposure signs/symptoms

Eye contact No specific data Inhalation No specific data Skin contact No specific data Ingestion No specific data

## Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed

person may need to be kept under medical surveillance for 48 hours.

Specific treatments No specific treatment

Protection of first-aiders No 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.

Article Number 25900467 Page: 2/8

Validation date 3 October 2019

Version 8

Cy™7 Bis NHS ester, 50 mg 25-9004-67

#### See toxicological information (Section 11)

# Section 5. Fire-fighting measures

**Extinguishing media** 

Suitable extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

None known.

Specific hazards arising from

the chemical

No specific fire or explosion hazard.

Hazardous thermal decomposition products

Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides

Special protective actions for

fire-fighters

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 (SCRA) with a full face-piece operated in positive pressure mode.

(SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel No action shall be taken involving a

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.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**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).

# Methods and materials for containment and cleaning up

Small spill Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with

equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a

licensed waste disposal contractor.

Large spill Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water

courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, 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.

# Section 7. Handling and storage

# Precautions for safe handling

**Protective measures** 

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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.

Advice on general occupational hygiene

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. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

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. Store locked up. 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. See Section 10 for incompatible materials before handling or use.

Article Number 25900467

Validation date 3 October 2019

Page: 3/8

Cy™7 Bis NHS ester, 50 mg 25-9004-67

# Section 8. Exposure controls/personal protection

#### Control parameters

#### Occupational exposure limits

None.

Appropriate engineering

controls

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.

**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.

#### **Individual protection measures**

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.

Eye/face protection

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. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree

of protection: safety glasses with side-shields.

Skin protection

Hand protection 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.

Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting

of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection 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.

Other skin protection Appropriate footwear and any additional skin protection measures 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 protection** Based on the hazard and potential for exposure, select a respirator that meets the appropriate

standard or certification. Respirators must be used according to a respiratory protection program to

ensure proper fitting, training, and other important aspects of use.

# Section 9. Physical and chemical properties

## **Appearance**

Physical state Solid.

Color Purple.

Odor Odorless.

Odor threshold Not available.

pH Not available.

Melting point Not available.

Boiling point Not available.

Flash point [Product does not sustain combustion.]

**Evaporation rate** Not available.

Flammability (solid, gas)

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.

Lower and upper explosive

(flammable) limits

Not available

Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.

**Solubility** Soluble in the following materials: cold water and hot water.

9 5 2 5 9 0 0 4 6 7

Partition coefficient: n-octanol/

water

Auto-ignition temperature

Decomposition temperature

Viscosity

Not available.

Viscosity

Not available.

Flow time (ISO 2431)

Not available.

Molecular weight

Not available.

# Section 10. Stability and reactivity

**Reactivity** No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** The product is stable.

Possibility of hazardous

reactions

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

Conditions to avoid No specific data.

Incompatible materials No specific data.

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous decomposition products should not be

produced.

Not available.

# Section 11. Toxicological information

# Information on toxicological effects

#### **Acute toxicity**

Not available.

# Irritation/Corrosion

Not available.

## Sensitization

Not available.

# **Mutagenicity**

Not available.

## Carcinogenicity

Not available.

Conclusion/Summary

To the best of our knowledge, the toxicological properties of this substance have not been

thoroughly investigated.

# Reproductive toxicity

Not available.

## **Teratogenicity**

Not available.

# Specific target organ toxicity (single exposure)

NameCategoryRoute of exposureTarget organsCy7 (Bis NHS ester)Category 2AllNot determined

# Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Not available.

Information on the likely routes

Routes of entry anticipated: Oral, Dermal, Inhalation.

of exposure

## Potential acute health effects

Eye contact No known significant effects or critical hazards.

**Inhalation** May cause damage to organs following a single exposure if inhaled.

Article Number 25900467

Page: 5/8 Validation date 3 October 2019

Cy<sup>™</sup>7 Bis NHS ester, 50 mg 25-9004-67

**Skin contact** May cause damage to organs following a single exposure in contact with skin.

Ingestion May cause damage to organs following a single exposure if swallowed.

## Symptoms related to the physical, chemical and toxicological characteristics

Eye contactNo specific data.InhalationNo specific data.Skin contactNo specific data.IngestionNo specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

## **Short term exposure**

Potential immediate effects Not available.

Potential delayed effects Not available.

Long term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

#### Potential chronic health effects

Not available.

GeneralNo known significant effects or critical hazards.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.

#### **Numerical measures of toxicity**

# **Acute toxicity estimates**

N/A

# Section 12. Ecological information

# **Toxicity**

Not available.

# Persistence and degradability

Not available.

#### **Bioaccumulative potential**

Not available.

#### **Mobility in soil**

Soil/water partition coefficient Not available.

(Koc)

Other adverse effects No known significant effects or critical hazards.

Cy™7 Bis NHS ester, 50 mg 25-9004-67

# Section 13. Disposal considerations

#### Disposal methods

The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. 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.

# Section 14. Transport information

	TDG Classification	DOT Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

Special precautions for user

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code Not available.

# Section 15. Regulatory information

#### **Canadian lists**

Canadian NPRI This material is not listed.

CEPA Toxic substances This material is not listed.

# International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

# **Montreal Protocol**

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

# Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

# **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

# **Inventory list**

Canada Not determined.

Europe Not determined.

Article Number 25900467



Cy<sup>™</sup>7 Bis NHS ester, 50 mg 25-9004-67

United States Not determined.

## Section 16. Other information

#### **History**

Date of printing5/7/2020Date of issue/Date of revision10/3/2019Date of previous issue4/24/2017

Version 8

sds\_author@cytiva.com

Key to abbreviations ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HPR = Hazardous Products Regulations IATA = International Air Transport Association IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified

by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available UN = United Nations

## Procedure used to derive the classification

Classification Justification

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Expert judgment Category 2

References

Not available.



Indicates information that has changed from previously issued 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.