

Material Safety Data Sheet

Revision Date: 03-Mar-2010

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product code S11342

Product name SYTO® 60 red fluorescent nucleic acid stain *5 mM solution in DMSO*

Company/Undertaking Identification

INVITROGEN CORPORATON 5791 VAN ALLEN WAY PO BOX 6482 CARLSBAD, CA 92008 760-603-7200

INVITROGEN CORPORATION 5250 MAINWAY DRIVE BURLINGTON, ONT CANADA L7L 6A4 800-263-6236

GIBCO PRODUCTS INVITROGEN CORPORATION 3175 STALEY ROAD P.O. BOX 68 GRAND ISLAND, NY 14072 716-774-6700

24 hour Emergency Response

866-536-0631

(Transport):

301-431-8585

Outside of the U.S. ++1-301-431-8585

For research use only

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous/Non-hazardous Components

| Chemical Name | CAS-No | Weight % |
|-------------------|---------|----------|
| dimethylsulfoxide | 67-68-5 | 60-100 |

3. HAZARDS IDENTIFICATION

Emergency Overview

Components of the product may be absorbed into the body through the skin

3. HAZARDS IDENTIFICATION

Form Liquid

Principle Routes of Exposure/ Potential Health effects

> **Eves** Irritating to eves.

Skin Components of the product may be absorbed into the body through the skin.

Inhalation May cause irritation of respiratory tract.

May be harmful if swallowed. Ingestion

Specific effects

Carcinogenic effects No information available Mutagenic effects No information available Reproductive toxicity No information available Sensitization No information available

Target Organ Effects Eyes. Skin.

HMIS

| Health | 1 |
|--------------|---|
| Flammability | 2 |
| Reactivity | 1 |

4. FIRST AID MEASURES

Skin contact Wash off immediately with plenty of water

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Ingestion Never give anything by mouth to an unconscious person

Inhalation Move to fresh air Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical

Special protective equipment for Wear self-contained breathing apparatus and protective suit

firefighters

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Use personal protective equipment Methods for cleaning up Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Handling Avoid contact with skin and eyes. Keep in properly labelled containers Storage

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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Occupational exposure controls

Exposure limits

| Chemical Name | OSHA PEL (TWA) | OSHA PEL (Ceiling) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|-------------------|----------------|--------------------|-----------------|------------------|
| dimethylsulfoxide | - | - | - | - |

Engineering measures Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Respiratory Protection In case of insufficient ventilation wear suitable respiratory equipment

Hand protection Impervious butyl rubber gloves. Nitrile gloves are not recommended. Some brands of

Nitrile gloves have breakthrough times of five minutes...

Eye protection Safety glasses with side-shields Skin and body protection Lightweight protective clothing.

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure Prevent product from entering drains.

controls

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form Liquid

Important Health Safety and Environmental Information

Boiling point/range°C 189°F No data availableMelting point/range°C 18.4°F No data availableFlash point°C 94°F No data availableAutoignition temperature°C No data available°F No data available

Oxidizing properties No information available

Water solubility soluble

10. STABILITY AND REACTIVITY

StabilityStable under normal conditions.Materials to avoidNo information availableHazardous decompositionNo information available

products

Polymerization Hazardous polymerisation does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

| Chemical Name | LD50 (oral,rat/mouse) | LD50 (dermal,rat/rabbit) | LC50 (inhalation,rat/mouse) |
|-------------------|-----------------------|--------------------------|-----------------------------|
| dimethylsulfoxide | 14500 mg/kg (Rat) | No data available | No data available |

Principle Routes of Exposure/

Potential Health effects

Eyes Irritating to eyes.

Skin Components of the product may be absorbed into the body through the skin.

Inhalation May cause irritation of respiratory tract.

Ingestion May be harmful if swallowed.

<u>Specific effects</u> (Long Term Effects)

Carcinogenic effectsNo information availableMutagenic effectsNo information availableReproductive toxicityNo information availableSensitizationNo information available

<u>Target Organ Effects</u> Eyes. Skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity effectsNo information available.MobilityNo information available.BiodegradationInherently biodegradable.BioaccumulationDoes not bioaccumulate.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations

14. TRANSPORT INFORMATION

IATA

Proper shipping name Not classified as dangerous in the meaning of transport regulations

Hazard Class
Subsidiary Class
Packing group
UN-No
No information available
No information available
No information available
No information available

15. REGULATORY INFORMATION

International Inventories

| Chemical Name | TSCA | PICCS | ENCS | DSL | NDSL | AICS |
|-------------------|--------|--------|--------|--------|------|--------|
| dimethylsulfoxide | Listed | Listed | Listed | Listed | - | Listed |

U.S. Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

U.S. State Regulations

| Chemical Name | Massachusetts - RTK | New Jersey - RTK | Pennsylvania - RTK | Illinois - RTK | Rhode Island - RTK |
|-------------------|------------------------|------------------|--------------------|----------------|--------------------|
| dimethylsulfoxide | - | - | - | - | - |

California Proposition 65

This product does not contain chemicals listed under Proposition 65

WHMIS hazard class:

D2B Toxic materials B3 Combustible liquid



This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. OTHER INFORMATION

For research use only

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

End of Safety Data Sheet