

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

**Product code** 10503027  
**Product name** DNAzol® Reagent

**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

**2. COMPOSITION/INFORMATION ON INGREDIENTS****Hazardous/Non-hazardous Components**

Chemical Name	CAS-No	Weight %
Thiocyanic acid, compound with guanidine (1:1)	593-84-0	30-60

**3. HAZARDS IDENTIFICATION****Emergency Overview**

Harmful if swallowed

**Form**  
Liquid

### 3. HAZARDS IDENTIFICATION

#### Principle Routes of Exposure/

#### Potential Health effects

Eyes

Not to be used for eyes. May cause eye irritation with susceptible persons.

Skin

Components of the product may be absorbed into the body through the skin. Irritating to skin and mucous membranes.

Inhalation

May cause irritation of respiratory tract.

Ingestion

Harmful if swallowed.

#### Specific effects

Carcinogenic effects

No information available

Mutagenic effects

No information available

Reproductive toxicity

No information available

Sensitization

No information available

#### Target Organ Effects

No information available

#### HMIS

Health	1
Flammability	0
Reactivity	0

### 4. FIRST AID MEASURES

Skin contact

Wash off immediately with plenty of water

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes

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

Water spray. Carbon dioxide (CO<sub>2</sub>). Foam. The product is not flammable.

Special protective equipment for firefighters

Wear self-contained breathing apparatus and protective suit

### 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.

Storage

Keep in properly labelled containers

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Occupational exposure controls

#### Exposure limits

Chemical Name	OSHA PEL (TWA)	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Thiocyanic acid, compound with guanidine (1:1)	-	-	-	-

**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** Protective gloves  
**Eye protection** Safety glasses with side-shields  
**Skin and body protection** Lightweight protective clothing.  
**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice  
**Environmental exposure controls** Prevent product from entering drains.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**General Information**

**Form** Liquid

**Important Health Safety and Environmental Information**

**Boiling point/range** °C No data available °F No data available  
**Melting point/range** °C No data available °F No data available  
**Flash point** °C No data available °F No data available  
**Autoignition temperature** °C No data available °F No data available  
**Oxidizing properties** No information available  
**Water solubility** soluble

**10. STABILITY AND REACTIVITY**

**Stability** Stable under normal conditions.  
**Materials to avoid** Acids.  
**Hazardous decomposition products** hydrogen cyanide (hydrocyanic acid). Contact with acids liberates very toxic gas..  
**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)
Thiocyanic acid, compound with guanidine (1:1)	593 mg/kg	No data available	No data available

**Principle Routes of Exposure/  
Potential Health effects**

**Eyes** Not to be used for eyes. May cause eye irritation with susceptible persons.  
**Skin** Components of the product may be absorbed into the body through the skin. Irritating to skin and mucous membranes.  
**Inhalation** May cause irritation of respiratory tract.  
**Ingestion** Harmful if swallowed.

**Specific effects**

**Carcinogenic effects** No information available

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

**Target Organ Effects** No information available

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects** No information available.  
**Mobility** No information available.  
**Biodegradation** No information available.  
**Bioaccumulation** No information available

## 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** No information available  
**Subsidiary Class** No information available  
**Packing group** No information available  
**UN-No** No information available

## 15. REGULATORY INFORMATION

### International Inventories

Chemical Name	TSCA	PICCS	ENCS	DSL	NDSL	AICS
Thiocyanic acid, compound with guanidine (1:1)	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 contain HAPs.

### U.S. State Regulations

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
Thiocyanic acid, compound with guanidine (1:1)	-	-	-	-	-

#### **California Proposition 65**

This product does not contain chemicals listed under Proposition 65

**WHMIS hazard class:**

Non-controlled

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**

This material is sold for research and development purposes only. It is not for any human or animal therapeutic or clinical diagnostic use. It is not intended for food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

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 be present unknown hazards and should be used with caution. Since Invitrogen Corporation 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, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

**End of Safety Data Sheet**