

Material Safety Data Sheet



Diagnostics

Authorization date: 11/25/1999
Revision date: 08/22/2006
Print Date: 08/24/2006
Version: 0

Product name: RNA/DNA Stabilization Reagent *Thyraseq*
Product number: 1934317
Global material number: 11934317001
Business area: Roche Applied Sciences
Product line: Not applicable
Instrument type: Not applicable
Supplier: Roche Diagnostics Corporation
1915 Hague Road
Indianapolis, IN 46250
Site Phone Number: 1-800-428-5074
Emergency telephone number:
CHEMTREC:
1-800-424-9300 (U.S. or Canada)
1-703-527-3887 (International)

Description 1: Bottle 1

Components	CAS Number	Weight %	OSHA PEL:	OSHA STEL:	ACGIH TLV:	ACGIH STEL:
Dithiothreitol	3483-12-3	1-5	NA	NA	NA	NA
Guanidine thiocyanate	593-84-0	60-70	NA	NA	NA	NA
Triton X-100	9002-93-1	20-30	NA	NA	NA	NA

Emergency Overview

NFPA Ratings: Health= 2 Flammability= 1 Reactivity= 1 Special= 1

Special Definitions: A=Allergen CA=Carcinogen CO=Corrosive F=Flammable H=Harmful I=Irritant Ox=Oxidizer PB=Potential Biohazard R=Reproductive S=Sensitizer T=Toxic T+=Highly Toxic W=Water Reactive

Principle routes of exposure: Ingestion, inhalation, skin and/or eye contact.

Inhalation: May cause irritation of respiratory tract.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion may cause lowering of blood pressure. Ingestion of larger amounts may cause defects to the central nervous system (e.g. dizziness, headache).

Skin contact: Contact causes skin irritation.

Eye contact: Moderately irritating to the eyes.

Sensitization or Odor threshold: None.

Medical conditions aggravated by exposure: None known

Additional information: None

Inhalation: Consult a physician. Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Skin contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion: Call a physician immediately. Do not induce vomiting without medical advice. Drink 1 or 2 glasses of water.

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Notes to physician: None determined

Suitable extinguishing media: Use dry chemical, CO2, water spray or "alcohol" foam.

Unusual hazards: None known.

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

Personal precautions: Use personal protective equipment. Evacuate personnel to safe areas. Remove all sources of ignition.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Do not let product enter drains.

Methods for cleaning up: Never return spills in original containers for re-use. Soak up with oil absorbent material. Sweep up or vacuum (if powder) or soak up with inert absorbent material (if liquid), then place into a suitable clean, dry, closed container, and label for disposal.

Handling: Protect from contamination. Wear personal protective equipment.

Storage: Keep containers dry and tightly closed to avoid moisture absorption and contamination.

Engineering measures: Ensure adequate ventilation.

Personal Protective Equipment

Respiratory protection: Respiratory protection is not required under normal use of this product. If respiratory protection is needed, follow the OSHA regulation, 29CFR1910.134. Always use a NIOSH approved respirator when necessary.

Hand protection: Wear appropriate protective gloves to prevent skin contact. Replace torn or punctured gloves promptly.

Skin and body protection: Wear appropriate body protection to prevent skin contact.

Eye protection: Wear appropriate eye protection to prevent eye contact.

Hygiene measures: When using, do not eat, drink or smoke. Keep away from food and drink. Wash hands before breaks and at the end of workday.

Boiling point/range: No information available

Melting point/range: Not determined

pH: Not determined

Physical state: Not determined.

Flash point: No information available.

LEL (%): Not determined

UEL (%): Not determined

Stability: Stable under recommended storage conditions.

Polymerization: None under normal processing.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapours. Carbon oxides. Sulphur oxides. Nitrogen oxides (nox). Cyanides.

Materials to avoid: Incompatible with strong acids and bases. Oxidising agents (strong).

Description 1: Bottle 1

Components	NIOSH - Selected LD50s and LC50s:	NIOSH Pocket Guide - Target Organs:
Triton X-100	= 1800 mg/kg Oral LD50 Rat	

Inhalation: No additional data available

Product number: 1934317

Skin: No additional data available
Oral: No additional data available
Mutagenic effects: No data is available on the product itself
Reproductive toxicity: No data is available on the product itself
Carcinogenic effects:

Bioaccumulation: No data available
Aquatic toxicity: Not applicable
Ecotoxicity effects: No data is available on the product itself

Waste from residues / unused products: Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

Is product hazardous to ship? No
DOT

Proper shipping name: None			
UN Number: Not applicable	Hazard class: Not applicable	Subsidiary risk: Not applicable	Packing group: Not applicable

ICAO/IATA

Proper shipping name: None			
UN Number: Not applicable	Hazard class: Not applicable	Subsidiary risk: Not applicable	Packing group: Not applicable

U.S. Regulations:

U.S. CERCLA/SARA/TSCA Regulatory Information: The following chemicals are listed under the following TSCA/SARA/CERCLA lists. Refer to TSCA regulation if you need a definition for acronyms that may be shown in the TSCA Inventory field in the table below

Components	CERCLA/SARA 302 RQ and TPQ (40 CFR 355, App.A)	CERCLA/SARA 304 RQ (40 CFR Table 302.4)	SARA 313 Emission reporting	TSCA Inventory
Dithiothreitol				Present
Guanidine thiocyanate				Present
Triton X-100				XU

U.S. Clean Water Act (CWA)/ California Proposition 65: The following chemicals are listed under the CWA and/or California Proposition 65:

Canadian Regulations:

Canada DSL Inventory List - This product complies with DSL
Canada NDSL Inventory List - This product does not comply with NDSL

Components	Canada - WHMIS: Classifications of Substances:
Dithiothreitol	D2B
Guanidine thiocyanate	D1B; D2B
Triton X-100	D2B

Reason for revision: Not applicable
References: None.
Additional advice: None
Prepared by: Roche Diagnostics, Health & Safety Department, MSDS Contact: 317-521-7425 or 317-521-7505

The information, data and recommendations contained herein are based upon information believed by Roche Diagnostics Corporation, after reasonable investigation and research, to be accurate; however, Roche Diagnostics Corporation does not warrant the accuracy of this information. All materials and mixtures may present unknown hazards and should be used with caution. When necessary or appropriate, independent opinions regarding the risk of handling or exposure should be obtained from trained professionals. Roche Diagnostics Corporation disclaims any warranty against patent infringement and the implied warranties of merchantability and fitness for a particular purpose. Customer's sole and exclusive remedy shall be replacement of the product or return of the product and refund of the purchase price, at Roche Diagnostics Corporation's option. In no case shall Roche Diagnostics Corporation be liable for incidental or consequential damages, including lost profits.

End of Safety Data Sheet