



Material Safety Data Sheet

5X RT Buffer

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

Preparation Name:

5X RT Buffer

Product code:

SM303-0050B, SM303-0010B

Use of the preparation:

For laboratory use.

Suitable for use as reaction buffer for reverse transcription.

Company identification:

GeneDireX, Inc.

Website: www.genedirex.com

2. HAZARDS IDENTIFICATION

GHS - Classification

Signal Word	Health Hazard	Physical Hazards
not hazardous	not hazardous	not hazardous

Principle Routes of Exposure/ Potential Health effects

Eyes May cause eye irritation with susceptible persons.

Skin May cause skin irritation in susceptible persons.

Inhalation May be harmful by inhalation.

Ingestion May be harmful if swallowed.

Specific effects

Carcinogenic effects none

Mutagenic effects none

Reproductive toxicity none

Sensitization none

Target Organ Effects No known effects under normal use conditions.

HMIS

Health 0

Flammability 0

Reactivity 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

4. FIRST AID MEASURES

Skin contact Rinse with plenty of water. If symptoms arise, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Ingestion Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.

Inhalation Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

Notes to physician Treat symptomatically.



Material Safety Data Sheet

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Special protective equipment for firefighters

Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.
Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Methods for cleaning up
Environmental precautions
Prevent further eakage or spillage if safe to do so.
See Section 12 for additional information.

Use personal protective equipment.
Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Handling Always wear reccommended Personal Protective Equipment.
No special handling advice required.
Storage Keep in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits

We are not aware of any national exposure limit.

Engineering measures Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection	In case of insufficient ventilation wear suitable respiratory equipment
Hand protection	Impervious 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	
Appearance	No information available	
Odor	No information available	
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	



Material Safety Data Sheet

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Materials to avoid	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products	None under normal use
polymerization	Hazardous polymerisation does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Principle Routes of Exposure/ Potential Health effects	
Eyes	May cause eye irritation with susceptible persons.
Skin	May cause skin irritation in susceptible persons.
Inhalation	May be harmful by inhalation.
Ingestion	May be harmful if swallowed.
Carcinogenic effects	none
Mutagenic effects	none
Reproductive toxicity	none
Sensitization	none
Target Organ Effects	No known effects under normal use conditions.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects	No information available.
Mobility	No information available.
Biodegradation	Inherently biodegradable
Bioaccumulation	Does not bioaccumulate.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

<u>IATA</u>	
Proper shipping name	Not classified as dangerous in the meaning of transport regulations
Hazard class	none
Subsidiary Class	none
Packing group	none
UN-No	none

15. REGULATORY INFORMATION

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
California Proposition 65
This product does not contain chemicals listed under Proposition 65



Material Safety Data Sheet

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 GeneDireX, Inc. 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.