# RIOLADS inc.

New England Biolabs 240 Country Road Ipswich, MA 01938

# **MATERIAL SAFETY DATA SHEET**

Telephone: (978)927-5054
Toll free: (800)632-5227
Fax: (978)921-1350
e-mail: info@neb.com

Msds Revision Date: 10/06

Polymerase #M0271

# **SECTION 1-CHEMICAL INFORMATION**

Product Name: Quick Load Tag 2X Master Mix SARA 313 NO

# SECTION 2-COMPOSITION/INFORMATION ON INGREDIENT

# NAME OF CHEMICALS:

1.	Glycerol	10 %	Cas.	#56-81-5	NO
2.	Tween-20	< 1%	Cas.	#9005-64-5	NO
3.	NP-40	< 1%	Cas.	#127087-87-0	NO
4.	xylene cyanol FF	< 1%	Cas.	#2650-17-1	NO
5.	orange G	< 1%	Cas.	#1936-15-8	NO

#### SECTION 3-HAZARDOUS IDENTIFICATION

**EMERGENCY OVERVIEW** 

Caution: Avoid contact and inhalation.

HMIS RATING HEALTH: 2

FLAMMABILITY: 0

REACTIVITY: 0

NFPA RATING

HEALTH: 2

FLAMMABILITY: 0

**REACTIVITY: 0** 

For additional information on toxicity, please refer to Section 11.

#### **SECTION 4-FIRST AID MEASURES**

ORAL EXPOSURE: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

**DERMAL EXPOSURE:** In case of contact, immediately wash skin with soap and copious amounts of water. Remove clothing and call a physician.

**EYE EXPOSURE:** In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

# **SECTION 5-FIRE FIGHTING MEASURES**

Extinguishing Media: Suitable: Water spray.

Carbon Dioxide, dry chemical powder or appropriate foam.

Special Firefighting Procedures: Wear self contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Emits toxic fumes under fire conditions.

Flash point: N/A
Flammability: N/A
Autoignition Temp: N/A

## SECTION 6-ACCIDENTAL RELEASE MEASURES

PROCEDURE(S) OF PERSONAL PRECAUTION(S): Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves and Chemical safety googles.

**METHODS FOR CLEANING UP:** Cover with dry lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

# **SECTION 7-HANDLING AND STORAGE**

Handling: User Exposure: Avoid inhalation. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.

Storage: Suitable: Keep tightly closed.

## **SECTION 8-EXPOSURE CONTROLS/PPE**

Engineering Controls: Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment: Government approved respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

General Hygiene Measures: Wash hands thoroughly after handling. Wash contaminated clothing before use.

#### SECTION 9-PHYSICAL AND CHEMICAL PROPERTIES

Physical Properties: Melting Point: 20°C Boiling Point: 182°C

Flash Point: 320°F, 160°C Method: closed up

Autoignition Temp: 370°C

**Explosion Limits in Air:** 

**Lower:** 0.9%

Specific Gravity: 1.262 Solubility: Water -Z26130

Vapor Pressure: < 1 MMHG @ 20°C

Vapor Density: 3.1 G/L

**PH:** 5.5–8.0

# **SECTION 10-STABILITY AND REACTIVITY**

Stability: Stable

Materials to Avoid: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, sulfur dioxides.

Hazardous Polymerization: Hazardous Polymerization: Will not occur

# **SECTION 11-TOXICOLOGICAL INFORMATION**

Route of exposure:

Skin contact: May cause skin irritaiton.

Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption.

Eye contact: May cause eye irritation.

**Inhalation:** May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract. **Signs and Symptoms of Exposure:** Nausea, headache and vomiting. To the best of our knowledge, the properties

have not been thoroughly investigated.

**IRRITATION DATA:** 

 SKN-RBT 500 MG/24H MLD
 85JCAE -, 207, 1986

 EYE-RBT 126 MG MLD
 BIOFX\* 9-4/970

 EYE-RBT 500 MG/24H MLD
 85JCAE -, 207, 1986

**TOXICITY DATA:** 

ORL-RAT LD50: 12600 MG/KG
IHL-RAT LC50: > 570 MG/M3/1H
IPR-RAT LD50: 4420 MG/KG
SCU-RAT LD50: 100 MG/KG
IVN-RAT LD50: 5566 MG/KG
ORL-MUS LD50: 4090 MG/KG
IPR-MUS LD50: 8700 MG/KG
SCU-MUS LD50: 91 MG/KG
IVN-MUS LD50: 4250 MG/KG
ORL-RBT LD50: 27 GM/KG
SKN-RBT LD50: > 10 GM/KG
IVN-RBT LD50: 53 GM/KG
ORL-GPG LD50: 7750 MG/KG

FEPRA7 4, 142, 1945 BIOFX\* 9-4/970 RCOCB8 56, 125,1987 NIIRDN 6, 215, 1982 ARZNAD 26,1581,1976 FRZKAP 6), 56, 1977 ARZNAD 28,1579,1978 NIIRDN 6, 215, 1982 JAPMA8 39, 583, 1950 DMDJAP 31, 276,1959 BIOFX\* 9-4/970 NIIRDN 6, 215, 1982 JIHTAB 23, 259, 1941

#### **TARGET ORGAN DATA:**

Behavioral (headache)

Gastrointestinal (nausea or vomiting)
Kidney, ureter, bladder (changes in tubules)
Kidney, ureter, bladder (changes in urine comp)
Paternal effects (spermatogenesis)
Paternal effects (testes, epididymis, sperm duct)
Effects on fertility (male ferility index)

Effects on fertility (post-implantation mortality Only selected registry of toxic effects of chemical substance (RTECS) data is presented here. See actual entry in RTECS

#### SECTION 12-ECOLOGICAL INFORMATION

No Data Available.

#### **SECTION 13-DISPOSAL CONSIDERATIONS**

Contact a licensed professional waste disposal service to dispose of this material. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations.

# **SECTION 14-TRANSPORT INFORMATION**

DOT

Proper Shipping Name: None

Non-Hazardous for Air Transport: non-hazardous for air transport.

ΙΑΤΑ

Non-Hazardous for Air Transport: non-hazardous for air transport.

#### SECTION 15-REGULATORY INFORMATION

**US Classification and Label Text** 

**US Statements:** Avoid contact and inhalation.

**United States Regulatory Information:** 

Sara Listed: No

Canada Regulatory Information WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

DSL: Yes NDSL: No

## **SECTION 16-OTHER INFORMATION**

#### **DISCLAIMER**

For R&D use only. Not for drug, household or other uses.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. New England Biolabs shall not be held liable for any damage resulting from handling or from contact with the above product.