

MATERIAL SAFETY DATA SHEET

Date Revised: May 14, 2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: 6X GelRed Prestain Loading Buffer with Orange Tracking Dye
Catalog Number: 41010
Unit Size: 1 mL
Manufacturer/Supplier: Biotium, Inc.
3159 Corporate Place, Hayward, CA 94545, USA
Phone: 1-510-265-1027, Fax: 1-510-265-1352
Web: <http://www.biotium.com>

2. HAZARDS IDENTIFICATION**Classification according to Regulation (EC) No 1272/2008[CLP]**

None

Classification according to Directive 1999/45/EC

None

Labelling according to Regulation (EC) No 1272/2008[CLP]**Hazard pictogram** GHS07**Signal word** Warning**Hazard statements** H315 skin irritant; H319 eye irritant, H335 may cause respiratory irritation**Precautionary statements**

P264 Wash hands thoroughly after handling., P280 Wear protective gloves/protective clothing/eye protection/face protection, P302+P352 IF ON SKIN: wash with plenty of soap and water, P332+P313 IF SKIN irritation occurs: Get medical advice/attention, P362 Take off contaminated clothing and wash before reuse, P280 Wear protective gloves/protective clothing/eye protection/face protection, P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do; continue rinsing, P337+P313 IF eye irritation persists: Get medical advice/attention, P261 Avoid breathing dust/fume/gas/mist/vapours/spray, P271 Use in a well-ventilated area, P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing, P312 Call a POISON CENTER or doctor/physician if you feel unwell.

HMIS Classification

Health hazard: 1

Flammability: 1

Physical hazards: 0

NFPA Rating

Health hazard: 1

Fire: 1

Reactivity Hazard: 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Name | CAS No. | EC No. | Index No. | Weight % | Classification according to 67/548/EEC | Classification according to regulation (EC)No1278/2008 |
|----------------|-----------|-----------|-----------|----------|--|--|
| GelRed | N/A | N/A | N/A | <0.1% | N/A | N/A |
| Orange G | 1936-15-8 | 217-705-6 | N/A | <1% | Skin irritant 2, Eye irritant 2, STOT SE 3 | N/A |
| Polysaccharide | N/A | N/A | N/A | <10% | N/A | N/A |

| | | | | | | |
|----------|---------|-----------|-----|---------|------------------------------------|-----|
| Glycerol | 56-81-5 | 200-289-5 | N/A | 50-100% | Skin irritant 2, Eye irritant 2 | N/A |
|----------|---------|-----------|-----|---------|------------------------------------|-----|

4. FIRST-AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.

Special protective equipment for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas. Remove all sources of ignition.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage. Soak up spilled substance with inert absorbent material. . Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid inhalation of vapor or mist.

Avoid direct contact with substance.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Store at 4°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Substance

CAS no.

| country | Austria | Belgium | Denmark | European Union | France | Germany |
|--------------------|---------|---------|---------|----------------|--------|---------|
| Limit value,8hours | -- | -- | -- | -- | -- | -- |

| | | | | | | |
|-------------------------|----|----|----|----|----|----|
| Limit value, short term | -- | -- | -- | -- | -- | -- |
|-------------------------|----|----|----|----|----|----|

| | | | | | | | |
|-------------------------|---------|-------|--------|-------|--------|-------------|----------------|
| country | Hungary | Italy | Poland | Spain | Sweden | Netherlands | United Kingdom |
| Limit value, 8hours | -- | -- | -- | -- | -- | -- | -- |
| Limit value, short term | -- | -- | -- | -- | -- | -- | -- |

| | | | | | | | |
|-------------------------|----------------|-----------|----------|-----------|--------|-------|-------------|
| country | United Kingdom | USA-NIOSH | USA-OSHA | Australia | Canada | Japan | South Korea |
| Limit value, 8hours | -- | -- | -- | -- | -- | -- | -- |
| Limit value, short term | -- | -- | -- | -- | -- | -- | -- |

Personal protective equipment

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|--|
| Chemical Name | 6X GelRed Prestain Loading Buffer with Orange Tracking Dye |
| Appearance | Orange liquid |
| Odor | Not determined |
| Odor threshold | Not determined |
| pH | Not determined |
| Melting point/freezing point | Not determined |
| Boiling point | Not determined |
| Flash point | Not determined |
| Evaporate rate | Not determined |
| Flammability | Not determined |
| Explosive limits | Not determined |
| Vapor pressure | Not determined |
| Vapor density | Not determined |
| Relative density | Not determined |
| Solubility | Not determined |
| Partition coefficient: n-octanol/water | Not determined |
| Auto-ignition temperature | Not determined |
| Decomposition temperature | Not determined |

| | |
|----------------------|----------------|
| Viscosity | Not determined |
| Explosive properties | Not determined |
| Oxidising properties | Not determined |

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames and sparks.

Materials to avoid

No data available

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50 None

Inhalation LC50 None

Dermal LD50 None

Other information on acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Additional Information

RTECS: None

12. ECOLOGICAL INFORMATION

Toxicity no information available
Persistence and degradability no information available
Biodegradation no information available
Mobility in soil no information available
Results of PBT and vPvB assessment no information available
Other adverse effects no information available
Additional information no information available

13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

14. TRANSPORT INFORMATION

IATA, IMDG, DOT(US) not dangerous good during transportation
UN number none
UN proper shipping name none
Transport hazard class none
Packing group none
Environmental hazards none
Special precaution for user none

15. REGULATION INFORMATION**US Federal Regulations**

Us Toxic Substances Control Act (TSCA): Not listed
SARA 302: No chemicals were found .
SARA 313: No chemicals were found.
SARA 311/312 Hazards : No chemicals were found.

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008

Prepared by: Regulatory Department
Biotium Inc.

Version no. 1

Reason for revision

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.