

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : Clarity OTX Lysis-Loading Buffer v 2.0
Product code : AL0-8579
Product group : Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Laboratory Use
Industrial/Professional use spec : Industrial
For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Phenomenex, Inc.
411 Madrid Ave.
90501 Torrance, CA - United States
T 310-212-0555 - F 310-328-7768
info@phenomenex.com - www.phenomenex.com

1.4. Emergency telephone number

Emergency number : INFOTRAC assistance (United States): +1-800-535-5053
INFOTRAC assistance (Outside United States): +1-352-323-3500

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. 2 H315
Eye Dam. 1 H318

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger

Hazardous ingredients : TRITON X-100

Hazard statements (CLP) : H315 - Causes skin irritation
H318 - Causes serious eye damage

Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling
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
P302+P350 - IF ON SKIN: Gently wash with plenty of soap and water
P362+P364 - Take off contaminated clothing and wash it before reuse

No labeling applicable

Clarity OTX Lysis-Loading Buffer v 2.0

Safety Data Sheet

according to Regulation (EC) No. 453/2010

2.3. Other hazards

Contains PBT/vPvB substances >= 0.1% assessed in accordance with REACH, Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|---|---------|--|
| guanidine,hydrochloride (Component) | (CAS No) 50-01-1 (EC no) 200-002-3 (EC index no) 607-148-00-0 | 56 - 58 | Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315 |
| TRITON X-100 (Component) substance listed as REACH Candidate (4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]) | (CAS No) 9002-93-1 | 1 - 3 | Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 |

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up in absorbent material. Collect spillage.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

Clarity OTX Lysis-Loading Buffer v 2.0

Safety Data Sheet

according to Regulation (EC) No. 453/2010

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
- Hygiene measures : Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container closed when not in use. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.
- Incompatible materials : Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

- Appropriate engineering controls : Either local exhaust or general room ventilation is usually required.
- Personal protective equipment : Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.



- Hand protection : Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.
- Eye protection : Chemical goggles or safety glasses. Safety glasses.
- Skin and body protection : Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.
- Respiratory protection : Wear appropriate mask.
- Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Color : Colorless.
- Odor : characteristic.
- pH : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : Non flammable
- Relative density : No data available
- Solubility : No data available
- Explosive properties : No data available
- Oxidizing properties : No data available
- Explosion limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

Clarity OTX Lysis-Loading Buffer v 2.0

Safety Data Sheet

according to Regulation (EC) No. 453/2010

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

| guanidine,hydrochloride (50-01-1) | |
|-----------------------------------|-----------------|
| LD50 oral rat | 475 mg/kg (Rat) |

| TRITON X-100 (9002-93-1) | |
|--------------------------|-----------------------|
| LD50 oral rat | 1800 mg/kg (Rat) |
| LD50 dermal rabbit | > 3000 mg/kg (Rabbit) |

| | |
|---|--|
| Skin corrosion/irritation | : Causes skin irritation. Based on available data, the classification criteria are not met |
| Serious eye damage/irritation | : Causes serious eye damage. Based on available data, the classification criteria are not met |
| Respiratory or skin sensitization | : Not classified Based on available data, the classification criteria are not met |
| Germ cell mutagenicity | : Not classified Based on available data, the classification criteria are not met |
| Carcinogenicity | : Not classified Based on available data, the classification criteria are not met May cause cancer |
| Reproductive toxicity | : Not classified Based on available data, the classification criteria are not met |
| Specific target organ toxicity (single exposure) | : Not classified Based on available data, the classification criteria are not met |
| Specific target organ toxicity (repeated exposure) | : Not classified Based on available data, the classification criteria are not met |
| Aspiration hazard | : Not classified Based on available data, the classification criteria are not met |
| Potential Adverse human health effects and symptoms | : Based on available data, the classification criteria are not met. |

SECTION 12: Ecological information

12.1. Toxicity

| guanidine,hydrochloride (50-01-1) | |
|-----------------------------------|----------------------------------|
| LC50 fish 1 | 1758 mg/l (48 h; Leuciscus idus) |

| TRITON X-100 (9002-93-1) | |
|--------------------------------|---|
| LC50 fish 1 | > 10 mg/l (96 h; Lepomis macrochirus; Toxicity test) |
| EC50 Daphnia 1 | 26 mg/l (48 h; Daphnia magna) |
| EC50 other aquatic organisms 1 | 10 mg/l (336 h; Lemna sp.; Biomass) |
| LC50 fish 2 | 8.9 mg/l (96 h; Pimephales promelas) |
| Threshold limit algae 1 | 500 mg/l (504 h; Selenastrum capricornutum; Cell numbers) |

12.2. Persistence and degradability

| Clarity OTX Lysis-Loading Buffer v 2.0 | |
|--|------------------|
| Persistence and degradability | Not established. |

Clarity OTX Lysis-Loading Buffer v 2.0

Safety Data Sheet

according to Regulation (EC) No. 453/2010

| guanidine,hydrochloride (50-01-1) | |
|--|-------------------------------------|
| Persistence and degradability | Not readily biodegradable in water. |

| TRITON X-100 (9002-93-1) | |
|---------------------------------|------------------------------------|
| Persistence and degradability | Biodegradable in water. |
| ThOD | 2.16 g O ₂ /g substance |

12.3. Bioaccumulative potential

| Clarity OTX Lysis-Loading Buffer v 2.0 | |
|---|------------------|
| Bioaccumulative potential | Not established. |

| guanidine,hydrochloride (50-01-1) | |
|--|----------------------------------|
| Log Pow | -1.7 |
| Bioaccumulative potential | Bioaccumulation: not applicable. |

| TRITON X-100 (9002-93-1) | |
|---------------------------------|------------------------|
| Log Pow | 4.86 (Estimated value) |

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

| Component | |
|-------------|---|
| (9002-93-1) | This substance/mixture meets the PBT criteria of REACH, annex XIII This substance/mixture meets the vPvB criteria of REACH, annex XIII |

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not considered hazardous
Proper Shipping Name (IATA) : Not considered hazardous

14.3. Packing group

14.4. Packing group

Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

14.6.4. Inland waterway transport

Carriage prohibited (ADN) : No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Clarity OTX Lysis-Loading Buffer v 2.0

Safety Data Sheet

according to Regulation (EC) No. 453/2010

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions

Contains substance on the candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues] (CAS 9002-93-1)

Contains no REACH Annex XIV substances.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

PHV SDS EU

Copyright 2012 Phenomenex, Inc. License granted to make paper copies for internal use. The information contained in this Safety Data Sheet is based on our current knowledge. The information contained in this document should be used only as a guide for appropriate safety precautions and should not be considered to be all inclusive. Users should make their own investigation to determine the suitability of the information for their particular purposes. The document does not represent any guarantee of the properties of the product. Phenomenex, Inc. shall not be held liable for any damage resulting from the handling or use of this product. Visit the Terms and Conditions of Sale link at www.phenomenex.com for additional terms and conditions of sale.