

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

1.1. Product identifier

Trade name : BL3 BUFFER

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

Use of the substance/mixture : Laboratory use/Manufacturing component/Research

1.3. Details of the supplier of the safety data sheet

Circulomics
701 E. Pratt St
Baltimore, MD 21202 - USA
T 410.996.4762

1.4. Emergency telephone number

Emergency number : 410.996.4762

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Acute Tox. 4 (Oral) H302
Skin Irrit. 2 H315

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H302 - Harmful if swallowed
H315 - Causes skin irritation

Precautionary statements (GHS-US) : P264 - Wash hands, forearms, face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P330 - If swallowed, rinse mouth
P332+P313 - If skin irritation occurs: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P501 - Dispose of contents/container to approved waste facility

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
guanidine,hydrochloride	(CAS No) 50-01-1	< 90	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315

BL3 BUFFER

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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 you feel unwell, seek medical advice (show the label where possible). |
| First-aid measures after inhalation | : Assure fresh air breathing. Allow the victim to rest. |
| First-aid measures after skin contact | : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Consult a doctor/medical service. Get medical advice/attention. |
| 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. Call a POISON CENTER/doctor/physician if you feel unwell. |

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

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|--------------------------------------|--|
| Symptoms/injuries after skin contact | : Causes skin irritation. |
| Symptoms/injuries after ingestion | : Swallowing a small quantity of this material will result in serious health hazard. |

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

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| suitable extinguishing media | : Foam. Dry powder. Carbon dioxide. Water spray. Sand. |
| 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. Avoid (reject) fire-fighting water to enter 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

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|----------------------|-----------------------------------|
| Emergency procedures | : Evacuate unnecessary personnel. |
|----------------------|-----------------------------------|

6.1.2. For emergency responders

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|----------------------|--|
| 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

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|-------------------------|--|
| Methods for cleaning up | : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. |
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6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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|-------------------------------|---|
| Precautions for safe handling | : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor. |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Wash hands, forearms, face thoroughly after handling. |

7.2. Conditions for safe storage, including any incompatibilities

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|------------------------|--|
| Storage conditions | : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight. Keep container closed when not in use. |
| Incompatible products | : Strong bases. strong acids. |
| Incompatible materials | : Sources of ignition. Direct sunlight. |

BL3 BUFFER

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear approved mask.
Other information	: When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: No data available
Odor	: characteristic.
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

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.

BL3 BUFFER

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.5. Incompatible materials

strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

guanidine,hydrochloride (50-01-1)

LD50 oral rat	475 mg/kg (Rat)
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Skin corrosion/irritation	: Causes skin irritation.
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Serious eye damage/irritation	: Not classified
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Respiratory or skin sensitization	: Not classified
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Germ cell mutagenicity	: Not classified
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Carcinogenicity	: Not classified
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Reproductive toxicity	: Not classified
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Specific target organ toxicity (single exposure)	: Not classified
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Specific target organ toxicity (repeated exposure)	: Not classified
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Aspiration hazard	: Not classified
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Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.
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Symptoms/injuries after skin contact	: Causes skin irritation.
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Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.
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SECTION 12: Ecological information

12.1. Toxicity

guanidine,hydrochloride (50-01-1)

LC50 fish 1	1758 mg/l (48 h; Leuciscus idus)
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12.2. Persistence and degradability

BL3 BUFFER

Persistence and degradability	Not established.
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guanidine,hydrochloride (50-01-1)

Persistence and degradability	Not readily biodegradable in water.
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12.3. Bioaccumulative potential

BL3 BUFFER

Bioaccumulative potential	Not established.
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guanidine,hydrochloride (50-01-1)

Log Pow	-1.7
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Bioaccumulative potential	Bioaccumulation: not applicable.
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

BL3 BUFFER

Safety Data Sheet

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

SECTION 14: Transport information

In accordance with DOT
No dangerous good in sense of transport regulations

Additional information

Other information : No supplementary information available.

ADR

Transport document description : UN N/A
Packing group (ADR) : N/A
Hazard identification number (Kemler No.) : N/A
Classification code (ADR) : N/A

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

guanidine,hydrochloride (50-01-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

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

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Skin Irrit. 2	Skin corrosion/irritation Category 2

BL3 BUFFER

Safety Data Sheet

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H302	Harmful if swallowed
H315	Causes skin irritation

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product