



Material Safety Data Sheet

acc.toISO/DIS11014

Printing date 01/04/2002

Reviewed on 01/04/2002

1 Identification of substance

- **Product details**
- **Trade name:** Buffer BR2
- **Manufacturer/Supplier:**
QIAGEN GmbH, Max-Volmer-Str. 4, 40724 Hilden, Germany
Tel.: (+49)-2103/29-0
- **Information department:**
QIAGEN Technical Service
QIAGEN Inc., 28159 Avenue Stanford, Valencia, CA 91355, USA
Tel.: 1-800-DNA-PREP (1-800-362-7737)
- **Emergency information:**
Poison Information Center Mainz, Germany
Tel.: +49-6131-19240/24h
- **MSDS-No.:** bBR2/2

2 Composition/Data on components

- **Chemical characterization**
 - **Description:** Liquid (Proprietary Compound Mixture)
 - **Dangerous components:**
- | | |
|----------------------------------|--------|
| 593-84-0 guanidinium thiocyanate | 25-50% |
|----------------------------------|--------|

3 Hazards identification

- **Hazard description:**
Harmful
- **Information pertaining to particular dangers for man and environment:**
Harmful by inhalation, in contact with skin and if swallowed.
Contact with acids liberates very toxic gas.
- **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0-4)**
Health=2
Fire=0
Reactivity=0
- **WHMIS ratings (scale 0-4)**
Health=2
Fire=0
Reactivity=0

4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse open eye for several minutes under running water. Then consult doctor.
- **After swallowing:** Immediately call doctor.

5 Firefighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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· **Protective equipment:** Do not inhale explosion gases or combustion gases.

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6 Accidental release measures

- **Person-related safety precautions:** Ensure adequate ventilation
- **Measures for environmental protection:** Do not allow to enter sewers/surface or groundwater.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
- **Requirements to be met by store rooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Class according to regulation on flammable liquids:** Void

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Protection of hands:** Protective gloves
- **Eye protection:** Tightly sealed goggles

9 Physical and chemical properties

- **Form:** Fluid
- **Color:** Colorless
- **Odor:** Characteristic
- **Change in condition**
- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** Undetermined.
- **Flashpoint:** Not applicable.
- **Autoigniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Density at 20°C (68°F):** 1.16g/cm³
- **Solubility in/Miscibility with Water:** Not miscible or difficult to mix.

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· pH-value at 20°C (68°F): 7.0

10 Stability and reactivity

- **Thermal decomposition/conditions to be avoided:**
No decomposition if used according to specifications.
- **Dangerous reactions:** Reacts with acids, alkalis and oxidizing agents.
- **Dangerous products of decomposition:** Danger of toxic pyrolysis products.

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful.

12 Ecological information

- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach groundwater, water course or sewage system.

13 Disposal considerations

- **Product:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

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15 Regulations

- **Sara**
- **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.
- **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.
- **TSCA (Toxic Substances Control Act):** All ingredients are listed.
- **Proposition 65**
- **Chemicals known to cause cancer:**
None of the ingredients is listed.
- **Chemicals known to cause reproductive toxicity:**
None of the ingredients is listed.
- **Product related hazard information:**
The product has been classified and marked in accordance with directives on hazardous materials.
- **Hazard symbols:**
Harmful
- **Hazard-determining components of labelling:**
guanidinium thiocyanate
- **Risk phrases:**
Harmful by inhalation, in contact with skin and if swallowed.
Contact with acids liberates very toxic gas.
- **Safety phrases:**
Keep away from food, drink and animal feeding stuffs.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing.
If swallowed, seek medical advice immediately and show this container or label.
- **National regulations:**
- **Classification according to VbF:** Void
- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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