QIAGEN

Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 11/08/2005 Reviewed on 11/08/2005

1 Identification of substance

· **Product details**

· **Trade name: Buffer RW1**

· **Manufacturer/Supplier:**
QIAGEN GmbH, QIAGEN Str. 1, 40724 Hilden, Germany
Tel.: (+49)-2103/29-0

· **Information department:**
QIAGEN Technical Service
QIAGEN Inc., 27220 Turnberry Lane, Valencia, CA 91355, USA
Tel.: 1-800-DNA-PREP (1-800-362-7737)

· **Emergency information:**
Poison Information Center Mainz, Germany
Tel.: +49-6131-19240 / 24 h

2 Composition/Data on components

· **Chemical characterization**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

593-84-0 guanidinium thiocyanate	2.5-10%
64-17-5 ethanol	2.5-10%

3 Hazards identification

· **Hazard description:** Not applicable.

· **Information pertaining to particular dangers for man and environment:**
Flammable.

· **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 = 0
Fire = 2
Reactivity = 0

· **WHMIS-ratings (scale 0 - 4)**
Health = 0
Fire = 2
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 opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:** Immediately call a doctor.

5 Fire fighting measures

· **Suitable extinguishing agents:**
CO_2, 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.

6 Accidental release measures

· **Person-related safety precautions:** Ensure adequate ventilation
· **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
· **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

7 Handling and storage

· **Handling:**
· **Information for safe handling:** Keep receptacles tightly sealed.
· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.

· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep receptacle tightly sealed.

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:**

CAS No. Designation of material	%	Type	Value	Unit
64-17-5 ethanol				
ACGIH TLV			1000	ppm
		A4		
NIOSH REL			1900	mg/m³, 1000 ppm
OSHA PEL			1900	mg/m³, 1000 ppm

· **Personal protective equipment:**
· **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
· **Breathing equipment:** Not required.
· **Protection of hands:** Protective gloves
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form:	Fluid
Color:	According to product specification
Odor:	Characteristic

· **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

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· **Flash point:**	21 - 55°C (70 - 131°F)
· **Ignition temperature:**	425°C (797°F)
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Density at 20°C (68°F):**	1.064 g/cm³
· **Solubility in / Miscibility with Water:**	Fully miscible.
· **pH-value at 20°C (68°F):**	7.5

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.

12 Ecological information

· **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

· **Product:**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **DOT regulations:**
· **Hazard class:** -

· **Land transport ADR/RID (cross-border):**
· **ADR/RID class:** -

· **Maritime transport IMDG:**
· **IMDG Class:** -

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· **Marine pollutant:** No

· **Air transport ICAO-TI and IATA-DGR:**
· **ICAO/IATA Class:** -

15 Regulations

· **Sara**
· **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.

· **Cancerogenity categories**
· **EPA (Environmental Protection Agency)**
None of the ingredients is listed.
· **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.
· **NTP (National Toxicology Program)**
None of the ingredients is listed.
· **TLV (Threshold Limit Value established by ACGIH)**
64-17-5 ethanol A4 2,5-10%
· **MAK (German Maximum Workplace Concentration)**
64-17-5 ethanol 5
· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.
· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

· **Product related hazard informations:**
The product has been classified and marked in accordance with directives on hazardous materials.

· **Risk phrases:**
Flammable.

· **National regulations:**

· **Technical instructions (air):**
· **Class Share in %**
· **III 2,5-10**

· **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.