Safety Data Sheet
acc. to OSHA HCS

Printing date 05/26/2015 Reviewed on 05/26/2015

1 Identification

· **Product identifier**

· **Trade name: EQAS® Urine Chemistry Program**

· **Catalog or product number:** BC40, BC45, QC40
· **Relevant identified uses of the substance or mixture and uses advised against**
· **Sector of Use** SU20 Health services
· **Application of the substance / the mixture** In-vitro laboratory reagent or component

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Bio-Rad Laboratories, Diagnostic Group
9500 Jeronimo Road
Irvine, California 92618-2017 1(949) 598-1200

· **Information department:** Technical services, customer support
· **Emergency telephone number:**
1(800) 424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION, or ACCIDENT.

*
2 Hazard(s) identification

· **Classification of the substance or mixture**
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS07

· **Signal word** Warning
· **Hazard statements**
H315 Causes skin irritation.
H319 Causes serious eye irritation.
· **Precautionary statements**
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.
P363 Wash contaminated clothing before reuse.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P302+P352 If on skin: Wash with plenty of soap and water.
· **Emergency overview:**
· **Routes of exposure:**
Ingestion
Inhalation
Skin

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/26/2015 Reviewed on 05/26/2015

Trade name: EQAS® Urine Chemistry Program

(Contd. of page 1)

· **Classification system**
· **NFPA ratings (scale 0-4)**
Health = 1
Fire = 0
Reactivity = 0
· **Special Hazards** Contains human sourced and/or potentially infectious components.
· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

*
3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with non-hazardous additions.

· **Listing of dangerous and non-hazardous components:**		
CAS: 57-13-6 EINECS: 200-315-5	urea	35-50%
CAS: 7647-14-5 EINECS: 231-598-3	sodium chloride	20-35%
CAS: 7447-40-7 EINECS: 231-211-8	potassium chloride	10-20%
CAS: 50-99-7 EINECS: 200-075-1	glucose	5-10%
CAS: 7778-77-0 EINECS: 231-913-4	potassium dihydrogenphosphate	5-10%
CAS: 60-27-5 EINECS: 200-466-7	Creatinine	2.5-5%
CAS: 7791-18-6 EINECS: 232-094-6	magnesium chloride hexahydrate	2.5-5%
	Human Urine	1.0-2.5%
EINECS: 268-338-3	Human Source Material	1.0-2.5%
CAS: 10035-04-8 EINECS: 233-140-8	Calcium chloride dihydrate	1.0-2.5%

· **Additional information**
Contains human sourced and/or potentially infectious components.
Contains components derived from human urine.

*
4 First-aid measures

· **Description of first aid measures**
· **General information** No special measures required.
· **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** Rinse mouth with water. Seek medical attention and appropriate follow-up.

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/26/2015 Reviewed on 05/26/2015

Trade name: EQAS® Urine Chemistry Program

(Contd. of page 2)

· **Information for doctor**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** No special measures required.

*
6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Handle as potentially infectious.
· **Environmental precautions:**
Keep contaminated washing water and dispose of appropriately.
Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb liquid components with liquid-binding material.
Pick up mechanically.
Clean the affected area carefully; suitable cleaners are:
Disinfectant
· **Reference to other sections** See Section 13 for disposal information.

*
7 Handling and storage

· **Handling**
· **Precautions for safe handling** No special precautions are necessary if used correctly.
· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**
· **Storage**
· **Requirements to be met by storerooms and receptacles:** According to product specification
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:**
Refer to package insert for additional information regarding storage conditions.
· **Specific end use(s)** No further relevant information available.

*
8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/26/2015 Reviewed on 05/26/2015

Trade name: EQAS® Urine Chemistry Program

(Contd. of page 3)

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
57-13-6 urea	
WEEL (United States)	Long-term value: 10 mg/m³

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment**
· **General protective and hygienic measures**
Follow the usual biosafety practices for handling potentially infectious materials.
The usual precautionary measures for handling chemicals should be followed.
· **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Synthetic gloves
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** Safety glasses
· **Body protection:** Protective work clothing.

*
9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Solid
Color:	Light yellow
· **Odor:**	Light
· **pH-value at 20 °C:**	5.5-7.0
· **Change in condition**	
Melting point/Melting range:	undetermined
Boiling point/Boiling range:	undetermined
· **Flash point:**	Not applicable
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Density:**	Not determined
· **Relative density**	Not determined.
· **Solubility in / Miscibility with**	
Water:	Soluble
· **Solvent content:**	
Organic solvents:	0.0 %
Solids content:	100.0 %

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/26/2015 Reviewed on 05/26/2015

Trade name: EQAS® Urine Chemistry Program

(Contd. of page 4)

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity**
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known

*
11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values for hazardous components per OSHA criteria:**		
57-13-6 urea		
Oral	LD50	14500 mg/kg (rat)

· **Primary irritant effect:**
· **on the skin:** Irritant to skin and mucous membranes.
· **on the eye:** Irritant effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Trade name: EQAS® Urine Chemistry Program

(Contd. of page 5)

· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

*
13 Disposal considerations

· **Waste treatment methods**
· **Recommendation** Dispose of waste in accordance to applicable national, regional, or local regulations.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

*
14 Transport information

· **UN-Number** · **DOT, ADR, ADN, IMDG, IATA**	Void
· **UN proper shipping name** · **DOT, ADR, ADN, IMDG, IATA**	Void
· **Transport hazard class(es)** · **ADR, ADN, IMDG, IATA** · **Class**	Void
· **Packing group** · **DOT, ADR, IMDG, IATA**	Void
· **Environmental hazards:** · **Marine pollutant:**	No
· **Special precautions for user**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	-

*
15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **SARA (Superfund Amendents and Reauthorization Act of 1986 - USA)**

· **Section 302/304 (40CFR355.30 / 40CFR355.40):**
None of the ingredients is listed.

· **Section 313 (40CFR372.65):**
None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

57-13-6	urea
7647-14-5	sodium chloride

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/26/2015 Reviewed on 05/26/2015

Trade name: EQAS® Urine Chemistry Program

(Contd. of page 6)

7447-40-7	potassium chloride
50-99-7	glucose
7778-77-0	potassium dihydrogenphosphate
60-27-5	Creatinine
69-93-2	uric acid
	Proprietary Reagent KW
51-35-4	L-4-hydroxyproline
70024-90-7	Human Serum Albumin (HSA)
55-10-7	DL-4-hydroxy-3-methoxymandelic acid
306-08-1	4-hydroxy-3-methoxyphenylacetic acid
9000-90-2	Amylase, alpha-
52-39-1	aldosterone
50-23-7	hydrocortisone

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

57-13-6	urea	II

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **National regulations**

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

· **Department issuing SDS:** Environmental Health and Safety.
· **Contact:**
Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000
· **Date of preparation / last revision** 05/26/2015 / -
· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/26/2015 Reviewed on 05/26/2015

Trade name: EQAS® Urine Chemistry Program

(Contd. of page 7)

ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

· **** Data compared to the previous version altered.***