

**1. INFORMATION OF THE SUBSTANCE/PREPARATION AND COMPANY**

- |     |                |   |
|-----|----------------|---|
| 1.1 | Product name   | DIASOURCE Rat 25OH Vitamin D total ELISA  |
|     | Catalog #      | KRR1971   |
|     | Kit components | Microtiter plate<br>Incubation Buffer<br>Concentrated conjugate<br>Concentrated HRP<br>Conjugate Buffer<br>Calibrators 0 to 5<br>Controls 1 and 2<br>Wash Solution<br>Chromogen :TMB<br>Stop Solution     |
| 1.2 | Intended Use   | For research use only   |
| 1.3 | Company        | DIAsource ImmunoAssays S.A.<br>Rue du Bosquet, 2<br>B-1348 Louvain-la-Neuve<br>Belgium<br>Tel. Nr. +32 (0)10/84.99.11<br>e-mail: <a href="mailto:tech.support@diasource.be">tech.support@diasource.be</a> |
| 1.4 | In emergencies | Call your local emergency centre  |

**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture:*****2.1.1 Classification according to Regulation (EC) no 1272/2008 (CLP)***

**Incubation Buffer, Conjugate Buffer, Calibrators 0-5 and Controls**  
Skin sensitisation CAT 1

**Stop Solution**  
Skin corrosive 1B

***2.1.2 Classification according to Directive 1999/45/EC***

**Incubation Buffer, Conjugate Buffer, Calibrators 0-5 and Controls**  
Irritation

***2.1.3 Additional Information***  
none

**2.2 Label elements:**

Labeling according to Regulation (EC) no 1272/2008 (CLP)

***Incubation Buffer, Conjugate Buffer, Calibrators 0-5 and Controls***

 H317  
 P280-P302+352-P333+313-P363

Danger

***Stop Solution***

 H314  
 P280-P301+330+331-P305+351+338-P309+311

Danger

**2.3 Other hazards:**
**Incubation Buffer**

Contains proteins from bovine, ovine and murine origin

**Conjugate Buffer**

Contains proteins from bovine origin.

**Calibrators 0 to 5**

Contain material from equine origin.

Contain material from human origin. Although these materials have been tested for HBsAg, anti-HCV and anti-HIV-1/2 and have been found not reactive, they should be considered as potentially infectious.

**Controls 1 and 2**

Contain material from murine origin.

<b>3. COMPOSITION/INFORMATION ON INGREDIENTS</b>
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**Hazardous ingredients:**

Component	Classification	concentration
<b>Incubation Buffer containing:</b>		
<b>Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1)</b>		
CAS-No. 55965-84-9	Skin Sensitization CAT 1, H317 T, N, R43	< 0,06%
Index-No. 613-167-00-5		
<b>Penta deca fluoro octanoic acid - PFOA</b>		
CAS-No. 335-67-1	Acute toxicity, Oral CAT 4, H302 C, R22-34-52/53	< 3%
EC-No. 206-397-9		



## MATERIAL SAFETY DATA SHEET

(According to regulation (EC) 1907/2006 and amendments)  
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Catalog #: KRR1971

<b>Calibrators 0-5, Controls and Conjugate Buffer containing:</b>			
<b>Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1)</b>			
CAS-No.	55965-84-9	Skin Sensitization CAT 1, H317	< 0,06%
Index-No.	613-167-00-5	T, N, R43	

<b>Stop Solution containing:</b>			
<b>Hydrochloric acid</b>			
CAS-No.	7647-01-0	Skin Corrosive CAT 1B, H314	< 5%
EC-No.	231-595-7	Xi	
Index-No.	017-002-01-X		

### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

##### Stop Solution, Incubation Buffer, Conjugate Buffer, Calibrators 0-5 and Conjugate

*After skin contact:*

- Wash immediately with soap and plenty of water for at least 10 minutes.
- Consult a physician.

- Remove and wash contaminated clothing before re-use.

*After eye contact:*

- Wash immediately with plenty of water for at least 15 minutes.

- Consult immediately a physician

*After ingestion:*

- Do NOT induce vomiting.

- Never give anything by mouth to an unconscious person.

- Rinse mouth with water.

- Consult a physician.

*After inhalation:*

- Transfer the person to an open place.

- If he does not breathe, proceed to artificial respiration or provide oxygen.

- Consult a physician.

#### 4.2 Indication of any immediate medical attention and special treatment needed

No data available.

### 5. FIRE FIGHTING MEASURES

#### All Kit Components

*Suitable extinguishing media:*

- All non combustible extinguishing media allowed

*Unsuitable extinguishing media:*

- No data available

*Special exposure hazards:*

- No generation of hazardous or toxic gases in dangerous quantities

*Instructions:*

- Due to small quantities: no special instructions apply

*Special protective equipment for firefighters:*

- Wear a breathing apparatus and protective clothing to avoid all contact with the skin and eyes.



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### 6. ACCIDENTAL RELEASE MEASURES

#### All Kit Components

*Personal protection:* see 8

*Environmental precautions:*

- Prevent soil and water pollution
- Discharge according to local regulations

*Clean-up:*

- Take up liquid spill into absorbent material
- Discharge of absorbed material according to local regulations
- Clean contaminated surfaces with an excess of water
- Wash clothing and equipment after handling

### 7. HANDLING AND STORAGE

#### All Kit Components

*Handling:*

- Observe normal hygiene standards
- Discharge according to local regulations
- Remove and clean contaminated clothing
- Handle and open the container with care

*Storage:*

- Keep container tightly closed
- Meet the legal requirements
- Keep away from: heat sources, combustible materials, acids, metals
- Storage temperature: see component label

*Specific purposes:*

- NA

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

##### Components with workplace control parameters

Component	No. Value	Control parameters	Basis
Hydrochloric acid CAS 7647-01-0	TWA	5 ppm 8 mg/m <sup>3</sup>	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
	STEL	10 ppm 15 mg/m <sup>3</sup>	
	TWA	1 ppm 2 mg/m <sup>3</sup>	UK. EH40 WEL - Workplace Exposure Limits
	STEL	5 ppm 8 mg/m <sup>3</sup>	



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### 8.2 Exposure Controls

#### 8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### 8.2.2 Personal protection equipment

##### All Kit Components

*Respiratory Protection* - Insufficient ventilation: wear respiratory protection

*Hand Protection* - Gloves

*Eye Protection* - Safety goggles

- Face shields

*Skin Protection* - Protective Clothing

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

**Microtiter Plate** : plate

**Controls 1 and 2, Calibrators 0 to 5** : Lyophilized, soluble in water

**Washing Solution, concentrated conjugate, concentrated HRP, Incubation Buffer, Conjugate buffer, Stop solution, Chromogen(TMB)** : Liquid

### 9.2 Other Information

No data available

## 10. STABILITY AND REACTIVITY

##### All Kit Components

*Stability*: All components are stable until expiry date if stored in specified conditions (see label)

*Reactivity/Hazardous decomposition products*: No hazardous decomposition products are formed in high quantities

*Conditions/Materials to avoid*: None known

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**ProClin 300** (contains mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1)):

Acute toxicity No data available

Skin corrosion/irritation Skin - rabbit - Corrosive

Serious eye damage/irritation Eyes - rabbit - Corrosive to eyes

Respiratory or skin sensitization May cause allergic skin reaction.

Germ cell mutagenicity No data available

Carcinogenicity IARC: No component of this product present at levels greater than or



## MATERIAL SAFETY DATA SHEET

(According to regulation (EC) 1907/2006 and amendments)

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Catalog #: KRR1971

Reproductive toxicity	equal to 0.1% is identified as
STOT-single exposure	probable, possible or confirmed human carcinogen by IARC.
STOT-repeated exposure	No data available
Aspiration hazard	No data available
Potential Health effects	No data available
	Inhalation Harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
	Ingestion Harmful if swallowed. Causes burns.
	Skin May be harmful if absorbed through skin. Causes skin burns.
	Eyes Causes eye burns.
	Aggravated Medical Condition
	May provoke asthmatic response in persons with asthma who are sensitive to airway irritants,
Additional information	Not available.
<b>HCI:</b>	
Acute toxicity	No data available
Skin corrosion/irritation	Skin - rabbit - Causes burns
Serious eye damage/irritation	Eyes - rabbit - Corrosive to eyes
Respiratory or skin sensitization	No data available.
Germ cell mutagenicity	No data available
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	No data available
STOT-single exposure	The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.
STOT-repeated exposure	No data available
Aspiration hazard	No data available
Potential Health effects	Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Causes respiratory tract irritation.
	Ingestion May be harmful if swallowed. Causes burns
	Skin May be harmful if absorbed through skin. Causes skin burns.
	Eyes Causes eye burns.
Signs and Symptoms of Exposure	burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.
Additional information	RTECS: MW4025000.



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### PFOA:

Acute toxicity	LD50 Intraperitoneal - rat - 189 mg/kg
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitization	No data available.
Germ cell mutagenicity	Genotoxicity in vivo - rat – Oral: DNA damage Genotoxicity in vivo - rat – Intraperitoneal: DNA damage
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	No data available
STOT-single exposure	No data available.
STOT-repeated exposure	No data available
Aspiration hazard	No data available
Potential Health effects	Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Ingestion Harmful if swallowed. Causes burns. Skin May be harmful if absorbed through skin. Causes skin burns. Eyes Causes eye burns.
Signs and Symptoms of Exposure	Cough, Shortness of breath, Headache, Nausea, Vomiting
Additional information	RTECS: RH0781000.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

#### Aquatic toxicity

**HCl:** Toxicity to fish LC50 - *Gambusia affinis* (Mosquito fish) - 282 mg/l - 96 h

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

No data available

### 12.6 Other adverse effects

**ProClin 300:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**PFOA:** Harmful to aquatic life.

**13. DISPOSAL CONSIDERATIONS**

*Provisions relating to waste:* Hazardous waste (91/689/EEC).

*Packaging/container:* Waste material code packaging (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 15 01 10 (packaging containing residues of or contaminated by dangerous substances)

*Disposal methods:*

- Patient samples, Calibrators 0 to 5 ,Controls 1 and 2 , incubation buffer and conjugate buffer are potentially infectious. They should be disposed of following established safety procedures and local regulations.
- All the kit components must be considered as hazardous waste. They should be disposed of following local regulations.

**14. TRANSPORT INFORMATION**

Not applicable

**15. REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.1 Safety, health and environmental regulations/legislation specific for the mixture**  
no data available

**15.2 Chemical Safety assessment**  
no data available

**16. OTHER INFORMATION**

**16.1 Indication of changes**  
v1: SDS changes as required by current REACH regulation (as amended by 453/2010).  
Classification and labeling according to CLP added.

**16.2 Abbreviations and acronyms**  
N Dangerous for the environment  
T Toxic  
C Corrosive  
Xi Irritation

**16.3 Key literature references and sources for data**  
SDS sheets provided by suppliers of raw materials.





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### 16.4 Classification and procedure used to derive the classification for mixtures according to regulation EC 1272/2008 – CLP

Classification of mixtures is based on the calculation method.

### 16.5 Relevant R-phrases and/or H-P statements

R22 Harmful if swallowed

R43 May cause sensitization by skin contact

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

H314 Causes severe skin burns and eye damage

H317 May cause an allergic skin reaction

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection

P301+330+331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P302+352 IF ON SKIN: Wash with plenty of soap and water

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P309+311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician

P333+313 If skin irritation or rash occurs: Get medical advice/attention

P363 Wash contaminated clothing before reuse

### 16.7 Training advice

This product is designed for use by professionals.

### 16.8 Further information

NOTE: The safety analysis of the lyophilized components in this kit has been performed on the reconstituted components. Therefore, the information in this MSDS and product labeling relates to the components as they will be used, i.e. after reconstitution.

The human blood components included in this kit have been tested by European approved and/or FDA approved methods and found negative for HBsAg, anti-HCV and anti-HIV-1 and 2. No known method can offer complete assurance that human blood derivatives will not transmit hepatitis, AIDS or other infections. Therefore, handling of reagents, serum or plasma specimens should be in accordance with local safety procedures.

All animal products and derivatives have been collected from healthy animals. Bovine components originate from countries where BSE has not been reported.

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

It remains the user's own responsibility to make sure that the information is appropriate and complete for his specific use of this product. The user is also responsible for observing any laws and applicable guidelines.

**MSDS established** : 2015-06-04

**Revision number** : 2