

## SAFETY DATA SHEET

### Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product name	VET-SAA 'Eiken' Reagent
Product code	V-SZ51 G-SZ52
Recommended Use and Restrictions on Use	For Veterinary Research Use Only
Supplier Name:	Eiken Chemical Co., Ltd.
Address:	4-19-9, Taito, Taito-ku, Tokyo 110-8408 JAPAN
Telephone number:	+81-3-5846-3479 (8:45 – 17:30 JST on WEEKDAY)
Telefax number:	+81-3-5846-3490

### Section 2: HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

Classification according to Regulation (EC) No 1272/2008

#### Reagent-1

Acute toxicity, Oral (Category 4)

Skin irritation (Category 2)

Eye irritation (Category 2)

Skin sensitization (Category 1)

#### Reagent-2

Skin irritation (Category 2)

Eye irritation (Category 2)

Skin sensitization (Category 1)

#### Label Elements

Pictograms



Signal Words

Warning

Hazard Statements

H302

Harmful if swallowed.

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H319

Causes serious eye irritation.

Precautionary Statements

P261

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264

Wash hands thoroughly after handling.

P270

Do not eat, drink, or smoke when using this product.

P272

Contaminated work clothing should not be allowed out of the workplace.

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.

P330

Rinse mouth.

P302 + P352

IF ON SKIN: Wash with plenty of soap and

P305 + P351 + P338	water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321	Specific treatment.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/ container in accordance with local disposal regulations.

**Supplemental Hazard Statements** This product contains ProClin 300.  
 $\leq 0.1$  w/v% (not exceeding the cut-off limits of GHS)

**Other Hazards** None

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Mixture	Mixture		
Composition	Reagent-1	Buffer solution	20ml $\times$ 2 vial
	Hazard substances		Guanidinium chloride 5.7% (0.6 mol/L) Lithium chloride 5.1% (1.2 mol/L) ProClin 300 0.1%
	Reagent-2	Latex Reagent	20ml $\times$ 2 vial
	Hazard substances		ProClin 300 0.1%

#### Information on Chemical Properties

Hazardous ingredients (Common names and synonyms)	Guanidinium chloride	Lithium chloride	ProClin 300
	Guanidine hydrochloride		
Chemical Formula	CH <sub>5</sub> N <sub>3</sub> ·HCl	LiCl	-
CAS No.	50-01-1	7447-41-8	55965-84-9
Other identifiers	EC No.: 200-002-3	EC No.: 231-212-3	-

### Section 4: FIRST-AID MEASURES

Eye Contact	IF IN EYES: Rinse with plenty of water immediately for at least 15 minutes. Consult a physician.
Skin Contact	IF IN SKIN: Wash with plenty of soap and water. Consult a physician.
Ingestion	IF SWALLOWED: Wash your mouth with plenty of water. Consult a physician.
Anticipated Acute Effects and Delayed Effects	No data available
Most important Symptoms/Effects	See Section 2 Hazard statements and Section 11

**Section 5: FIRE-FIGHTING MEASURES**

Extinguishing Media	Water, powder, CO <sub>2</sub> , foam
Prohibited Extinguishing	Not applicable
Specific Hazards arising from the Substance or Mixture	Carbon oxides, Nitrogen oxides (NO <sub>x</sub> ), Hydrogen chloride gas
Special Protective Actions for Firefighters	Wear self-contained breathing apparatus for firefighting if necessary.

**Section 6: ACCIDENTAL RELEASE MEASURES**

Personal Precautions, Protective Equipment, Emergency Procedures	Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
Environmental Precautions	Do not pour product down the drain or river directly.
Methods for Cleaning Up	Wipe up the solution with disposal without creating dust. Keep in suitable, closed containers for disposal.
Reference to Other Section	For disposal, see section 13.

**Section 7: HANDLING AND STORAGE**

Precautions for Safe Handling	Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Conditions for Safe Storage, Including Any Incompatibilities	Store at 2 - 10°C. Keep container closed and away from direct sunlight. Do not freeze.
Specific End Use(s)	Non

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

Control Parameters	Components with workplace control parameters: no data available.
Exposure Controls	
Engineering measures	Use at a laboratory with facilities for washing body and eyes.
Personal protective equipment	Use personal protective equipment to avoid contact with eyes, mouth, skin, and clothing respond to situations. Wear protective gloves. Chemical goggles or safety glasses.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

Color	Reagent 1: Clear and colorless Reagent 2: Milky white
Physical state	Liquid, odorless.
pH	Reagent 1: 7.2 – 7.6 Reagent 2: 7.1 – 7.5
Melting point/ Freezing Point	No data available
Boiling Point/ Initial Boiling Point / Boiling Range	No data available
Flash Point	No data available
Flammability Range/ Explosive	No data available

range

Vapor pressure	No data available
Vapor density	No data available
Specific gravity Relative Density	1.03 – 1.06 g/cm <sup>3</sup>
Solubility n Octenol/ Water partition coefficient	No data available
Spontaneous Ignition Temperature	No data available
Decomposition Temperature	No data available
Odor Threshold	No data available
Evaporation Rate	No data available
Flammability(Solid/Gas)	No data available

**Section 10: STABILITY AND REACTIVITY**

Reactivity	No data available
Stability	Stable until expiry date under recommended conditions.
Hazardous Reaction Possibility	No data available
Conditions to Avoid	No data available
Incompatible Materials	Oxidizing agents
Hazardous Decomposition Substances	In the event of fire: see section 5

**Section 11: TOXICOLOGICAL INFORMATION**

Acute toxicity	<p>Guanidinium chloride  LD50 Oral - rat - 475 mg/kg  Remarks: Behavioral: Altered sleep time (including change in righting reflex). Behavioral: Excitement. Diarrhea  LD50 Oral - mouse - 571 mg/kg  Remarks: Behavioral: Altered sleep time (including change in righting reflex). Behavioral: Muscle contraction or spasticity. Behavioral: Irritability.  LD50 Dermal - rabbit - 2,000 mg/kg  LD50 Oral - rat - 1,120 mg/kg</p> <p>Lithium chloride  LD50 Oral – rat - 526-840 mg/kg</p> <p>ProClin 300  LD50 Oral - rat - 862 mg/kg  LD50 Dermal-rabbit - 2,800 mg/kg</p>
Skin Corrosivity/ Irritative	<p>Guanidinium chloride and Lithium chloride  Skin - rabbit - Skin irritation  ProClin 300  Skin - rabbit - Skin corrosive</p>
Serious Eye Damage/ Irritative	<p>Guanidinium chloride and Lithium chloride  Eyes - rabbit - Irritating to eyes  ProClin 300  Eyes - rabbit - Corrosive to eyes</p>

Respiratory Sensitization/ Sensitization	Skin	Guanidinium chloride Buehler Test - guinea pig - Did not cause sensitization on laboratory animals. Lithium chloride No data available ProClin 300 Guinea pig – May cause sensitization by skin contact.
Germ Cell Mutagenicity		Guanidinium chloride Not mutagenic in Ames Test. Lithium chloride and ProClin 300 No data available
Carcinogenicity		Guanidinium chloride and ProClin 300 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. Lithium chloride No data available
Reproductive Toxicity		Guanidinium chloride and ProClin 300 No data available Lithium chloride cat.2; HSDB, 2007
Specific target organ/ Systemic toxicity(Single Exposure)		Guanidinium chloride and ProClin 300 No data available Lithium chloride Nervous system (IUCLID, 2000)
Specific target organ/ Systemic toxicity(Repeated Exposure)		Guanidinium chloride and ProClin 300 No data available Lithium chloride Nervous system, Kidney (IUCLID, 2000)
Aspiration Hazard		No data available
Additional Information		Guanidinium chloride RTECS: MF4300000 ProClin 300 RTECS: Not available To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## Section 12: ECOLOGICAL INFORMATION

Toxicity	Guanidinium chloride Toxicity to fish LC50 - Leuciscus idus (Golden orfe) – 1,759 mg/l Lithium chloride Toxicity of fish LC50 – Ptychocheilus Lucius – 17mg/L/96hr (AQUIRE, 2011) ProClin 300 No data available
Persistence and Degradability	Guanidinium chloride Result: - Not readily biodegradable. Lithium chloride and ProClin 300 No data available

Bioaccumulative Potential	Guanidinium chloride and ProClin 300 No data available Lithium chloride log Pow = -2.7 (ICSC, 1997)
Mobility in Soil	No data available
Results of PBT and VPVB Assessment	Guanidinium chloride and Lithium chloride No data available ProClin 300 This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Other Adverse Effects	Guanidinium chloride and Lithium chloride No data available ProClin 300 An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

**Section 13: DISPOSAL CONSIDERATIONS**

Waste Treatment Methods	Product Dispose in accordance with local disposal regulations. Contaminated Containers and Packaging Dispose the package of the product in accordance with local disposal regulations.
-------------------------	---

**Section 14: TRANSPORT INFORMATION**

During transportation, be sure the container has no leakage, not placed upside down, well packed up as to not collapse and crash on the floor and have any cracks.  
The temperature of transportation should be 2 - 10°C.

**Section 15: REGULATORY INFORMATION**

<u>15.1</u> Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
<u>15.2</u> Chemical Safety Assessment	For this product a chemical safety assessment was not carried out

**Section 16: OTHER INFORMATION**

The above information is provided based on our best knowledge and information at the date of its publication. It does not represent any guarantee of this product. In case of special handling, carry out safety measures as appropriate for the application and method of use before attempting to use the substance with user's own responsibility. Eiken Chemical shall not be held liable for any damage from use of this information or from use of this product.