



# Uric acid FS\* TOOS

#### Order Information

**Cat. No.** 1 3001 99 11 920 

### Intended Use

Diagnostic reagent for quantitative in vitro determination of uric acid in serum or heparin plasma on automated DiaSys respons®910 VET.

For veterinary use only.

#### Method

Enzymatic photometric test using TOOS (N-ethyl-N-(hydroxy-3-sulfopropyl)-m-toluidin)

Uric acid is oxidized to allantoin by uricase. The generated hydrogen peroxide reacts with 4-aminoantipyrine and N-ethyl-N-(hydroxy-3-sulfopropyl)-m-toluidin (TOOS) to a blue violet dye. Ascorbate oxidase avoids interference by ascorbic acid.

## Uric acid + $H_2O + O_2 \longrightarrow$ Allantoin + $CO_2 + H_2O_2$

POD TOOS + 4-Aminoantipyrine + 2 H<sub>2</sub>O<sub>2</sub> ------► Indamine + 3 H<sub>2</sub>O

#### Reagents

#### **Components and Concentrations**

R1:	Phosphate buffer	pH 7.0	100 mmol/L
	TOOS		1.25 mmol/L
	Ascorbate oxidase		≥ 1.2 kU/L
R2:	Phosphate buffer	pH 7.0	100 mmol/L
	4-Aminoantipyrine		1.5 mmol/L
	K <sub>4</sub> [Fe(CN) <sub>6</sub> ]		50 µmol/L
	Peroxidase	(POD)	≥ 5 kU/L
	Uricase	. ,	> 250 11/1

#### Storage and Stability

Reagents are stable up to the date of expiry indicated on the kit, if stored at  $35.6 - 46.4^{\circ}F$  and contamination is avoided. Protect the reagents from light.

#### Warnings and Precautions

- 1. The reagents contain sodium azide (0.95 g/L) as preservative. Do not swallow! Avoid contact with skin and mucous membranes.
- 2. The reagents contain animal material. Handle the product as potentially infectious according to universal precautions and good clinical laboratory practices.
- N-acetylcysteine (NAC), acetaminophen and metamizole medication leads to falsely low results in animal samples.
- In very rare cases, samples of animals with gammopathy might give falsified results.
- Please refer to the safety data sheets and take the necessary precautions for the use of laboratory reagents. For diagnostic purposes, the results should always be assessed with the animal's medical history, clinical examinations and other findings.
- 6. For professional use only.

#### Waste Management

Refer to local legal requirements.

#### **Reagent Preparation**

The reagents are ready to use. The bottles are placed directly into the reagent rotor.

#### **Materials Required**

General laboratory equipment

#### Specimen

Serum or heparin plasma

Stability: 2 days at 39.2 – 46.4°F Discard contaminated specimens.

#### **Calibrators and Controls**

DiaSys TruCal U is recommended for calibration. TruCal U calibrator values have been made traceable to the reference method gas chromatography-isotope dilution mass spectrometry (GC-IDMS). Use DiaSys TruLab N and P for internal quality control. Each laboratory should establish corrective action in case of deviations in control recovery.

	Cat. No.	ł	Kit si	it size	
TruCal U	5 9100 99 11 063	20	х	3 mL	
TruLab N	5 9000 99 11 062	20	х	5 mL	
TruLab P	5 9050 99 11 062	20	х	5 mL	

#### **Performance Characteristics**

The performance characteristics were evaluated with human samples and might differ from results obtained with various animal specimen.

Measuring range up to 25 mg/dL. In case of higher concentrations re-measure samples after manual dilution with NaCl solution (9 g/L) or use rerun function.							
Limit of detection**		0.1 mg/dL					
Onboard stability		6 weeks					
Calibration stability		3 weeks					
Interfering substance	Interferences ≤ 10% up to		Analyte concentration [mg/dL]				
Ascorbic acid	30 mg/dL		7.95				
Bilirubin (conjugated)	25 mg/dL		3.55				
	25 mg/dL		7.94				
Bilirubin (unconjugated)	23 mg/dL		3.66				
	23 mg/dL		7.95				
Hemoglobin	650 mg/dL		3.30				
	650 mg/dL		9.22				
Lipemia (triglycerides)	2200 mg/dL		3.26				
	22	00 mg/dL	8.40				
For further information on interfering substances refer to Young DS.							

Effects of Drugs on Clinical Laboratory Tests. 5th. ed. Volume 1 and 2. Washington, DC: The American Association for Clinical Chemistry Press, 2000.

\*\* according to CLSI document EP17-A, Vol. 24, No. 34

#### **Conversion Factor**

Uric acid [mg/dL] x 59.48 = Uric acid [µmol/L]

#### **Reference Range**

Each laboratory should determine own reference ranges for its individual animal population.



DiaSys Diagnostic Systems GmbH Alte Strasse 9 65558 Holzheim Germany www.diasys-us.com

\* Fluid Stable