



# Phosphate FS\*

In-vitro-Diagnostic for veterinary use only

Diagnostic reagent for quantitative in vitro determination of phosphorus in serum or plasma on DiaSys respons<sup>®</sup> 910 VET

## Order Information

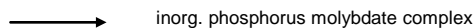
Cat. No. 1 5211 99 11 920  
4 twin containers for 200 tests each

## Method

Photometric UV test with endpoint determination

## Principle

Ammonium molybdate + Sulphuric acid + Phosphate



Absorption maximum of the complex is at 340 nm.

## Reagents

### Components and Concentrations

R1: Glycine/sulphuric acid buffer 50 mmol/L  
R2: Glycine buffer 50 mmol/L  
Ammonium molybdate 1.75 mmol/L

### Storage Instructions and Reagent Stability

The reagents are stable up to the end of the indicated month of expiry, if stored at 35.6 – 46.4°F and contamination is avoided. Do not freeze the reagents!

### Warnings and Precautions

1. Reagent 1: Warning. H290 May be corrosive to metals. P234 Keep only in original container. P280 Wear protective gloves/protective clothing/eye protection. P390 Absorb spillage to prevent material damage.
2. In very rare cases, samples of animals with gammopathy might give falsified results.
3. To avoid contamination and carryover, special care should be taken in combination with Rheumatoid factor FS reagent.
4. 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.
5. For professional use only!

### Waste Management

Please refer to local legal requirements.

### Reagent Preparation

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

## Specimen

Serum or heparin plasma

Stability :  
2 days at 39.2°F to 46.4°F

Discard contaminated specimens.

## Calibrators and Controls

For calibration, DiaSys TruCal U calibrator is recommended. The assigned values of the calibrator have been made traceable to a primary phosphate standard (traceable to NIST-SRM 723 reference material). For internal quality control DiaSys TruLab N and P controls should be assayed. Each laboratory should establish corrective action in case of deviations in control recovery.

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

## Performance Characteristics

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

All concentrations given in mg/dL refer to phosphorus.

Measuring range up to 30 mg/dL phosphorus (in case of higher concentrations re-measure samples after manual dilution with NaCl solution (9 g/L) or use rerun function).	
Limit of detection**	0.2 mg/dL phosphorus
On-board stability	3 weeks
Calibration stability	7 days

Interfering substance	Interferences < 10%	Phosphorus [mg/dL]
Ascorbate	up to 30 mg/dL	2.02
Hemoglobin	up to 450 mg/dL	2.69
	up to 900 mg/dL	6.14
Bilirubin, conjugated	up to 60 mg/dL	3.12
	up to 70 mg/dL	6.94
Bilirubin, unconjugated	up to 80 mg/dL	3.11
	up to 80 mg/dL	7.04
Lipemia (triglycerides)	up to 900 mg/dL	3.32
	up to 1000 mg/dL	7.34

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 NCCLS document EP17-A, vol. 24, no. 34

## Conversion Factor

Phosphate [mmol/L] = Phosphorus [mmol/L]  
Phosphorus [mg/dL] x 0.3229 = Phosphorus [mmol/L]  
Phosphorus [mg/dL] x 3.06619 = Phosphate [mg/dL]

## Reference Range

### Phosphorus

DOG	CAT	HORSE	CATTLE	Unit
2.6 – 6.2	2.7 – 6.9	1.9 – 6.3	5.0 – 8.6	mg/dL

Source:

Reference ranges have been validated by DiaSys USA according to National Reference Laboratory standards.

Each laboratory should check if the reference ranges are transferable to its own animal population and determine own reference ranges if necessary.

## Manufacturer

DiaSys Diagnostic Systems GmbH  
Alte Strasse 9 65558 Holzheim Germany