



# **REACT™**

## **Ethylene Glycol Test Kit**

### **INDICATION:**

The REACT™ test kit is designed to detect the presence of ethylene glycol in the serum or plasma of cats and dogs. Ethylene glycol in an enzyme catalyzed reaction causes the solution to change color.

### **CONTENTS:**

This REACT™ test kit contains:

- 1 precision 40 µL pipette
- 1 transfer 1 mL pipette
- 1 yellow capped vial containing indicating powder
- 1 black capped vial containing buffer solution
- 1 white capped vial containing activating powder

### **PRECAUTIONS AND WARNINGS:**

Read and understand the test indications, instructions, and warnings before use.

This test must be performed using only serum or plasma. Only use heparin or EDTA as an anticoagulant.

Draw blood for this test before administration of any preparations containing propylene glycol, glycerol, sorbitol or mannitol. Failure to do so could result in a false positive result. In addition, do not use thimerosal to preserve the sample as this may lead to a false positive. Do not use isopropyl alcohol to disinfect the area before extracting the blood sample. Propylene glycol may be found in some injectables, activated charcoal suspensions, semi-moist diets or non-toxic anti-freeze. Glycerol may be found in cough syrups, liqueurs or confections. Ethanol does not interfere with the results of this test; however, when combined with propylene glycol or glycerol it will produce a false positive.

Fomepizole interferes with the enzyme reaction thus preventing the color change. Fomepizole may block a positive result.

### **INSTRUCTIONS:**

- 1) Prepare serum or plasma samples before starting test.
- 2) Use the 1 mL transfer pipette to transfer all the buffer solution from the black capped vial into the yellow capped indicating powder vial. Close cap and shake gently until the powder is dissolved.
- 3) Use the same pipette to transfer all the resulting solution into the white capped activating powder vial. Close cap and shake gently until the powder is dissolved. Do not shake for more than ten seconds.

*(cont. on back page)*

## **INSTRUCTIONS: (cont.)**

- 4) Transfer half of the solution back into the empty black capped buffer vial to be used as a negative control. Cap the control vial with the black cap and invert vial 3 times.
- 5) Immediately use the 40  $\mu$ L precision pipette to transfer 40  $\mu$ L of serum or plasma into the white capped vial filled with solution by first squeezing the top bulb until the bottom bulb is filled and then dispensing by squeezing the bottom bulb. Cap the sample vial with the white cap, invert vial 3 times and start timing the reaction.
- 6) If ethylene glycol is present, the solution in the white capped vial will turn a dark purple and also be darker than the negative control. If there is not a color difference between the vials at the times outlined below then the result is negative for ethylene glycol.

**For dogs:** If there is a distinctive purple color change in the white capped vial in less than 45 seconds then the animal is at a toxic level and should be treated immediately. If a color change occurs between 45 seconds and 6 minutes then there is a presence of ethylene glycol. Treatment should be at the discretion of the veterinarian based on the estimated time of exposure and a clinical assessment.

**For cats:** If there is a distinctive purple color change in the white capped vial in less than 60 seconds then the animal is at a toxic level and should be treated immediately. If a color change occurs between 60 seconds and 6 minutes then there is a presence of ethylene glycol. Treatment should be at the discretion of the veterinarian based on the estimated time of exposure and a clinical assessment.

- 7) The negative control may also turn light purple during the test so care should be taken to ensure that the control is clearly distinguished from the sample by using the correct caps as indicated in these instructions (white for the sample and black for the control).

**FOR VETERINARY USE ONLY**

**DO NOT USE AFTER EXPIRATION DATE**

**KEEP OUT OF REACH OF CHILDREN AND PETS**

**NOT FOR HUMAN USE**

**STORE REFRIGERATED**

**2°C - 8°C (37°F - 46°F)**

**For Customer Service: (800) 874-9764**

**[www.prnpharmaceutical.com/REACT](http://www.prnpharmaceutical.com/REACT)**

**MANUFACTURED FOR**

**PRN Pharmaceutical**

***An Employee-Owned Company***

**PENSACOLA, FLORIDA 32514**

**10-2009**