# **CataKlear™ – Lipid Clearing Agent**

# **Product Information Sheet**



Cat: No. 0104-40

1 x 12.5ml Reagent & 40 microcentrifuge tubes

# Introduction

Gross elevations of serum or plasma lipoproteins (lipaemia) cause turbidity in the sample which can interfere with the accuracy of the assay of some analytes which use colorimetric methods.

Removal of this interfering lipaemia can be achieved by several techniques, including ultracentrifugation (the best method) and solvent extraction. However, these methods have practical disadvantages, including large sample requirements, the use of a high-speed centrifuge or the use of toxic solvents.

**CataKlear**<sup>™</sup> has been developed to solve this problem without interfering with the accuracy of most tests.

#### **Method Principle**

**CataKlear**<sup>™</sup> is a stable, liquid colloidal nanoparticle dispersion of selectively sized silicone oxides, various surfactants and buffering components. The lipid components in serum/plasma are released through the activity of the surfactants and attach to the silicone oxide nanoparticles. Upon centrifugation, these lipid-silicone oxide nanoparticles are deposited on the bottom of the centrifuge tube leaving the clear, lipid-free serum/plasma layer ready for decanting and testing.

#### **Reagent Presentation**

**CataKlear**<sup>™</sup> is supplied in packs of 1 x 12.5ml CataKlear Reagent & 40 microcentrifuge tubes

#### Handling & Storage

CataKlear can be stored between 2-25°C. This means refrigerated or at room temperature (not in direct sunlight). If stored in the fridge please bring to room temperature before use.

#### Sample

Lipaemic serum is the sample of choice, although lithium heparin plasma samples can also be used. However, the user should be aware of the tests this anti-coagulant can affect.

# **Method Procedure**

- Pipette, to each empty micro centrifuge tube, 50 µL of CataKlear concentrate from the bottle. Re-cap bottle immediately.
- Then pipette 1 mL (less if necessary but at least 500 µL) of lipid containing serum. (i.e. visibly turbid samples.) into the tube, mix well & close the cap and allow it to stand for 10 minutes at room temperature.
- Centrifuge the tubes at speeds of 5,000g or more for 15 minutes until the sample has been cleared of its lipemic appearance and the fat has been deposited in a tight button on the bottom of the tube.
- Carefully remove supernatant & place in a tube ready for testing
- Results after clinical analysis should be multiplied by 1.1 to account for sample dilution, or adjusted, if necessary, if a lesser volume of serum is used.

*Please Note: It is advisable for each user to establish their own procedure because centrifuges' maximum speeds can vary.* 

NOTE:- Once bottle is initially opened, discard after 60 days. CataKlear, in small volumes,will gel when over-exposed to air. Rev 1.2 DMT 2023.06.19

# Limitations and Quality Control

Research has shown that **CataKlear**<sup>™</sup> is unlikely to interfere with the assay of the following analytes: Albumin, ALP, ALT, Amylase, Creatinine, Phosphate and Urea. Details of a study are available on request. However, because users will be using a wide variety of reagents and analysers, we strongly recommend that each laboratory establish performance characteristics of **CataKlear**<sup>™</sup> with their own analytical system. Please see below:

Pipette 0.5ml of a commercial Control Serum into a prepared **CataKlear**<sup>™</sup> tube and process in the normal way. Run your tests on non-treated and treated portions of Control Serum and compare results. In this way, you will be able to determine if **CataKlear**<sup>™</sup> is likely to affect the accuracy of any of your tests.

#### **Precautions and Safety**

Avoid contact of reagent with skin and eyes. If contact occurs, wash affected area with copious amounts of cold water.

Health and Safety Data Sheet available on request.

If you have any queries regarding the use of CataKlear<sup>™</sup> Lipid Clearing Agent please telephone 01798 874567 or email <u>info@vetlabsupplies.co.uk</u>