Liquid Scintillation Counter - Applications Note

0 counts in CPMa when using automatic luminescence correction

Introduction

This applications note describes a problem relating to getting 0 counts in the CPMa (count region a) channel whilst using luminescence correction on a TriCarb series liquid scintillation counter.

Description of the issue

TriCarb series Liquid scintillation counters have a number of Count Correction options within the software. These allow the machine to automatically correct for interferences in analysis, for example correcting for luminescence.

The problem discussed in this applications note is seen when luminescence correction is turned on. The problem results in 0 counts being reported in CPMa and 100% reported in the luminescence readout.

Cause of the issue

The cause of the issue is the LUMI.DAT file is missing from the correct location in the software.

Solution to the issue

To solve this problem a copy of the LUMI.DAT file is required (available from the service provider) and requires copying into the correct location on the liquid scintillation counter computer.

The location for liquid scintillation counters running on QuantaSmart software is:

C:\PACKARD\QSIC\BIN

C:\TRICARB\BIN