

HOURIGAN GLYCOL DETERMINATION KIT

Ethylene glycol (CAS# 107-21-1) is a toxic chemical with an Oral LD50 of 7712 mg/kg (Rat) and a LD50 Dermal of 10600 mg/kg (Rat) which can cause kidney failure, brain damage, and death. Propylene glycol (CAS# 57-55-6) is GRAS (generally regarded as safe) according to the US Food and Drug Administration (FDA), and is therefore safe to use in foods.

Both chemicals are commonly used as antifreezes to lower the freezing point for industrial and automotive use. For many reasons other than toxicity and environmental reasons it becomes necessary to know which of the two glycols is present in a given water. For years we have been told that to tell them apart in industrial concentrations requires Mass Spectroscopy or Gas Chromatography/ Mass Spectroscopy. That is just not true.

Finally, we have developed a test kit that allows you to make this determination in the field. This test kit is intended for use with industrial concentrations where glycol is being used as an antifreeze. If concentrations fall to the level that the glycol will not be detected with refractive index or specific gravity, this test kit will not be effective. You will once again need to send a sample to a laboratory for a more detailed trace analysis. Likewise, should both glycols be present together in the same sample, this test kit will not be effective.



But for those more common situations where a customer wants to add more glycol to a system or need to dump a treated system, this test kit will allow you to make that determination and allow you to do it in a field environment. The test kit comes with the test equipment you need to perform test, test kit instructions and a sturdy padded carrying case.



Quite simply the test kit requires you to measure the specific gravity of the glycol solution record it and then perform a refractive index determination on the same solution. Next you compare the two results. For only one of the two glycols will both tests give you the same freezing point. That will be the glycol in your sample. The test instructions provide a hypothetical answer to make the procedure as clear as possible.

To view pricing or to purchase this kit, click on the hyperlink below:

<https://www.richardhouriganinc.com/sunshop/catalog/rdt001.html>