

U-M Program to Reduce the Consumption of Tax-free Alcohol

Denatured Alcohol a Safer, Less Expensive Alternate

Did you know that there is a safer, less costly, and more readily available alternative to 190/200 Proof Ethanol? Using denatured alcohol wherever possible can provide the following benefits:

- * **Cost savings ranging from 13.5% and 17.4%**
- * **Order on-line through M-marketsite. No "special" tax-free requisition forms to download, complete and fax to Fisher.**
- * **No restrictions on ordering quantities**
- * **Can order denatured alcohol anytime for next day delivery**
- * **Eliminates the need for expensive DOT packaging and special handling**

Please see the table below showing the cost savings between Tax-Free Alcohol and Denatured Alcohol.

Item_#	DESCRIPTION TAX-FREE ALCOHOL	Cost	Denatured_#	Cost	Savings
540699	ETHYL ALCOHOL 190 PROOF 1GAL	\$10.32	A962P-4 1 GAL	\$8.52	17.4%
540730	ETHYL ALCOHOL 200 PROOF 1 GAL	\$10.60	A405P-4 1 GAL	\$9.17	13.5%

ADDITIONAL SAVINGS – PLUS NO MIXING

Fisher Item# HC1000: Pre-Made 70% Ethanol for cleaning purposes an alternative for 200 Proof 1/5 Gallon – One gallon is \$8.00

MOST IMPORTANTLY:

- **Any use of ethyl alcohol for cleaning purposes, such as a 70% ethanol wipe for Biological Safety Cabinets or Tissue Culture hoods should consider the cost savings and time savings associated with use of pre-made 70% ethanol.**
- **Staining and Fixing applications can benefit from the advantages denatured alcohol alternatives.**

Details Regarding Denatured Ethyl Alcohol Use:

Many common applications for use of ethyl alcohol allow for the use of denatured ethyl alcohol. Denatured alcohol has been altered to prohibit consumption. In most jurisdictions, the sale of ethanol, as a pure substance, or in the form of alcoholic beverages, is heavily taxed. In order to relieve non-beverage industries of this tax burden, governments specify formulations for denatured alcohol, which consists of ethanol blended with various additives to render it unfit for human consumption. These additives, called denaturants, are generally either toxic (such as methanol) or have unpleasant tastes or odors (such as denatonium benzoate).

Specialty denatured alcohols are denatured alcohol formulations intended for a particular industrial use, containing denaturants chosen so as not to interfere with that use. While they are not taxed, purchasers of specialty denatured alcohols must have a government-issued permit for the particular formulation they use and must comply with other regulations.

Completely denatured alcohols are formulations that can be purchased for any legal purpose, without permit, bond, or other regulatory compliance. It is intended that it be difficult to isolate a product fit for human consumption from completely denatured alcohol. For example, the completely denatured alcohol formulation used in the United Kingdom contains (by volume) 89.66% ethanol, 9.46% methanol, 0.50% pyridine, 0.38% naphtha, and is dyed purple with methyl violet.

Please contact Alexandra Howells, Fisher Chemical Specialist to assist you in sourcing the correct product for your applications.

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For questions on the Ethyl Alcohol or Denatured Alcohol Programs contact Bonny Webber,
U-M Manager Strategic Supplier Program, at bwebber@umich.edu or 734.647.6346.