



## **SHELF LIFE (EXPIRATION DATES)**

Most solvents in their pure state have an indefinite shelf life if stored in unopened containers under proper conditions. Since many industries require expiration dating as part of their protocols and since Pharmco has only carried out verification to three years, expiration dates for most common solvents is three years from the date of manufacture on the certificate of analysis. This includes almost all solvents in our catalog such as, Acetone, Methanol, Reagent Alcohol and IPA (2-propanol), Ethyl Acetate etc.. Only certain solvents have shorter shelf lives. Please consult with us to determine if a particular solvent of interest has a shelf life shorter than three years. Examples include Formalin 10%. This has a shelf life of 18 months.

In general, most acids have a shelf life of three years. Additional care must be taken with Nitric and Sulfuric Acid, as exposure to sun and heat will accelerate decomposition.

## In general, pure 190 and 200 proof ethanol is rated with a shelf life of 36 months from the date of manufacture. Most but not all specially denatured alcohol formulations have a shelf life of up to five years.

The UV component of pure ethanol is extremely sensitive and can fail within three months depending on the package style. Therefore, shelf life is a function of customer application.

Product integrity is highly susceptible to storage condition. All ethyl alcohol products should be tightly sealed and stored in a consistently cool, dry area. It is the end user's responsibility to monitor the storage conditions and their effects on the product. End users should refer to the applicable MSDS Section VII.

Approved by: Paul DiMarco, Vice President Quality Management Date: 10/24/01

This document has been electronically generated and is therefore not signed. A signed copy is on file in Pharmco's Quality Control office.

Variances to this expiration date policy are documented on a case by case basis. Note that these expiration dates are based on industry experience with Pharmco's products and packaging materials.

Expiration dates are not recorded on labels or COA's unless requested on the customer order.

Approved by: Paul DiMarco, Vice President Quality Management Date: 10/24/01

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58 Vale Road, Brookfield, CT 06804, USA Telephone: (203) 740-3471 Fax (203) 740-3481 E-Mail: <u>paul@pharmco-prod.com</u> Website: <u>www.pharmco-prod.com</u>