



ORGANIC VOLATILE IMPURITIES / RESIDUAL SOLVENTS

(PPS251, Rev. 1.2, 02/18, KMC)

RE: Ethyl Ether (Diethyl Ether) – all grades sold by Greenfield Global USA Inc. – Organic Volatile Impurities, or Class 1, 2, and 3 Residual Solvents, as defined by the Current USP/NF General Chapter <467>.

NO CHEMICALS WHATSOEVER ARE USED AS SOLVENTS AT ANY POINT IN THE MANUFACTURE, FORMILATION OR PACKAGING OF ETHYL ETHER MANUFACTURED BY Greenfield Global USA Inc.

Class 1 Solvents: Greenfield Global USA Inc. maintains dedicated storage and handling systems including separate tanks, lines and pumps for our Ethyl Ether and neither uses nor has any reason to suspect that any Class 1 solvents are produced in the manufacturing process. These Class 1 solvents include Benzene, Carbon tetrachloride, 1,2-Dichloroethane, 1,1-Dichloroethene, and 1,1,1-Trichloroethane.

Class 2 Solvents: Greenfield Global USA Inc. maintains dedicated storage and handling systems including separate tanks, lines and pumps for our Ethyl Ether and neither uses nor has any reason to suspect that Class 2 solvents, including but not limited to Chloroform, 1,4-Dioxane, Methylene Chloride, Trichloroethylene, are produced in the manufacturing process.

Class 3 Solvents: Diethyl Ether is produced as a byproduct of the hydration of ethylene to make ethanol. Ethanol is listed as a Class 3 solvent and may appear as an impurity / low level contaminant in Ethyl Ether. The typical level for Ethanol content is far below the concentration limit stated in Table 3 “Class 3 Residual solvents”.

In addition some grades of Ethyl Ether are stabilized with Ethyl Alcohol. If intentionally added, limit of Ethanol in Ethyl Ether is 1.5 – 2.5%

Please refer to the Certificate of Analysis for lot-specific data.

Ethyl Ether itself would be considered a Class 3 residual solvent if found in any other product.

Other Residual Solvents: Ethyl Ether does not contain any Other Residual Solvents listed in Table 4 “Other Residual Solvents”.