



ORGANIC VOLATILE IMPURITIES / RESIDUAL SOLVENTS

(PPS258, Rev. 1.3, 02/18, KMC)

RE: **HEXANES** – 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>.

Class 1 Solvents: Greenfield Global USA Inc. maintains dedicated storage and handling systems for Hexanes. Hexanes may contain trace amounts of Benzene. Benzene is NOT used as a solvent, but may appear in Hexanes as an impurity.

Greenfield Global USA Inc. neither uses nor has any reason to suspect that any other Class 1 solvents are produced in the manufacturing process. These Class 1 solvents include 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 for Hexanes 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.

Hexanes may contain trace amounts of Cyclohexane. Cyclohexane is NOT used as a solvent, but may appear in Hexanes as an impurity. The typical level for Cyclohexane content in Hexanes is far below the concentration limit stated in Table 2 “Class 2 Residual solvents” found in the current USP General Chapter <467>.

Hexanes itself would be considered a Class 2 Residual Solvent if found in any other solvent.

Class 3 Solvents: Although NOT used as solvents at any point in the manufacturing of Hexanes, the following chemicals listed as Class 3 Residual Solvents may appear as impurities / related substances / low level contaminants in Hexanes: Pentane and Heptane.

Typical levels of these contaminants are in amounts that are far below the concentration limit stated in Table 3 “Class 3 Residual solvents” found in the current USP General Chapter <467>.

Other Residual Solvents: Hexanes does not contain any Other Residual Solvents found in Table 4 “Other Residual Solvents” found in the current USP General Chapter <467>.