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HSST ALIPHATIC SOLVENT SCREENING TEST FACT SHEET

INTRODUCTION

This class of organics is associated with petroleum products (gasoline, diesel fuels, jet fuels, etc.) as well as the direct use of hexane solvents. Also, the incomplete combustion of petroleum products will result in an environment enriched with such compounds.

n-HEPTANE is used as a solvent and as a standard in testing knock of gasoline engines. Routes of exposure include inhalation and skin absorption. Toxic effects are dermatitis and irritation of the mucous membrane.

n-HEXANE is a widely used solvent in industry. Commercial grade hexane contains 50 - 90% hexane and the rest 2-methylpentane and 3-methylpentane. Its main use is in gasoline, jet fuels, rubber, paints, lacquers, and printing ink. Routes of exposure include inhalation, skin absorption, and ingestion. The toxic effects are nausea, headache, and dizziness.

n-PENTANE is used in solvent extraction processes, and found in petroleum and natural gas. Pentane can cause irritation of the eyes and nose, dermatitis, and narcotic effects when exposed through skin absorption or inhalation.

CYCLOPENTANE, also known as pentamethylene, is used as a solvent. Its harmful effects are as a CNS depressant, loss of equilibrium, coma, and respiratory failure.

2,2-DIMETHYLBUTANE is a flammable liquid used in industry as a solvent. Its toxic effects are irritation and narcosis.

REFERENCES

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