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INNOVATIVE RESEARCH FOR A SUSTAINABLE FUTURE

PARIS III – EPA'S SOLVENT SUBSTITUTION SOFTWARE TOOL (PROGRAM FOR ASSISTING THE REPLACEMENT OF INDUSTRIAL SOLVENTS)

Overview

For decades, industrial and manufacturing companies have used chemical solvents in the development of products and processes. This is due to the effective performance of solvents. However, some of these solvents may be harmful to human health and the environment. As a result, many companies are looking to find safer, more sustainable solvent alternatives.

That's why the United States Environmental Protection Agency (EPA) developed PARIS III – a solvent substitution software tool that allows users to select more sustainable solvent replacements with properties closest to those traditionally used by industry.

PARIS III

PARIS III is one of EPA's Chemical Safety for Sustainability research program efforts. The software application contains a database of over five thousand solvents used by industry.

PARIS III uses a screening technology to evaluate the thousands of high priority chemicals for



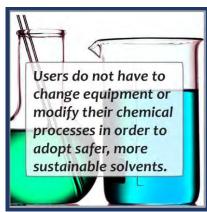


potential toxicity. The software also blends solvents in different proportions to find a variety of suitable substitutes. A ranked list of solvent mixtures is then created within minutes for the user to select from.

Who Can Use It?

PARIS III is designed for companies looking for sustainable alternatives to reduce the environmental impact of their industrial processes. It can also be useful when designing new industrial processes. Interested individuals include:

- Chemists
- Environmental Engineers
- Environmental Consultants
- Solvent Engineers
- Solvent Technicians



Installation

PARIS III is free public domain software. Users can install PARIS III software and download the user's guide directly to their computer from:

http://www2.epa.gov/chemical-research/program-assisting-replacement-industrial-solvents-iii-paris-iii

EPA's Chemical Safety for Sustainability Research Program

EPA's chemical safety research focuses on improving the safe production, use, and disposal of chemicals. This is a major priority in support of actions to protect human health and the environment. The Agency's Chemical Safety for Sustainability research program provides the decision-support tools needed to meet that priority, while advancing innovative ways to evaluate chemicals, conduct risk management, and prioritize time-critical research.

http://www2.epa.gov/aboutepa/about-chemical-safety-sustainability-research-program

Summary

PARIS III solvent substitution software tool is one of EPA's chemical safety decision-support tools. It offers a cost-effective approach to finding solvent substitutes less harmful to human health and the environment. Users do not have to change equipment or modify their chemical processes in order to adopt safer, more sustainable solvents.

More information

EPA's Chemical Research - http://www2.epa.gov/chemical-research

EPA Chemical Safety for Sustainability Fact Sheet http://www2.epa.gov/sites/production/files/2013-12/documents/css-fact-sheet.pdf

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