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Nota di contenuto	Front Cover; Cleaning with Solvents: Science and Technology; Copyright; Contents; Preface; Acknowledgments; Disclaimer; What You Can Dowith This Book; A Note onOrganization; Units Used in This Book; External References Citedin This Book; Chapter 1 -Relationship of Solvent Properties to Structure; 1.1 BACKGROUND; 1.2 THE ELEMENTS OF CLEANINGSOLVENTS; 1.3 THE INCREDIBLE SHRINKINGPERIODIC TABLE; 1.4 A SOLVENT CAN BE ELEMENTSARRANGED IN A STRUCTURE; 1.5 A SOLVENT CAN ALSO BEA STRUCTURE POPULATED WITHADDITIONAL ELEMENTS; 1.6 THE FUTURE OF SOLVENTDESIGN 1.7 SPECIFIC RELATIONSHIPS OFCOMPOSITION AND STRUCTURE TOSOLVENT PROPERTIES1.8 SOLVENT DESIGN ISMULTIDIMENSIONAL; 1.9 SOLVENT DESIGN GOALS; 1.10 DESIGN OF NON-TRADITIONALSOLVENTS; 1.11 SOLVENT SELECTION; Endnotes; Chapter 2 -Solubility Scales (Parameters); 2.1ABSOLUTE AND RELATIVE INFORMATION; 2.2MOLECULAR SOUP; 2.3MAY THE FORCE(S)BB.A FULL AND COMPLETE DISCUSSION OF ALL IDENTIFIED INTERMOLECULAR (AS WELL AS INTERATOMIC) FORCES IS BEYON ...; 2.4SOLUBILITY PARAMETERS; 2.5KAURI BUTANOL (KB) VALUE; 2.6OTHER MEASURES OF SOLVENCY; 2.7HILDEBRAND SOLUBILITY PARAMETER 2.8HANSEN THREE-DIMENSIONAL SOLUBILITY PARAMETERS2.9NUMERICAL VALUES OF HANSEN SOLUBILITY PARAMETERS; 2.10THE BASIC APPROACH - COMPARISON TO OTHER MATERIALS; Chapter 3 - Solvent Selection for Specific Tasks; 3.1BACKGROUND; 3.2THE NATURE

OF SOILS; 3.3THE BASIC APPROACH TO SOLVENT SELECTION; 3.4THIS AUTHOR'S APPROACH; 3.5AUTOPSY OF SOME SOILS; 3.6FOOD-DERIVED RESIDUE; 3.7LUBRICANTS; 3.8GREASES; 3.9COOLANTS OR HYDRAULIC FLUIDS; 3.10 POLYMER-DERIVED RESIDUES; 3.11BIOLOGICAL RESIDUE (S); 3.12GENERAL OBSERVATIONS ABOUT SOILS; 3.13USE OF HANSEN SOLUBILITY PARAMETERS IN SOLVENT SELECTION  
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 3.26IDENTIFICATION OF THE HSP VALUES OF INDUSTRIAL SOIL COMPOSITES3.27WORKING WITHOUT NUMBERS-USE OF THE HSP WITHOUT SOIL IDENTIFICATION; 3.28LIMITATIONS OF HSP SEPARATION (RA) FOR GOOD SOLVENT CLEANING PERFORMANCE; 3.29ABOUT CLEANING OF ALL SOILS; 3.30THE EFFECT OF NORMAL100 BOILING TEMPERATURE; 3.31VAPOR DEGREASING VS. COLD CLEANING; 3.32HSP FOR VAPOR DEGREASING VS. COLD CLEANING; Chapter 4 -SHE Management (Solvent Substitution); 4.1BACKGROUND; 4.2WHY SUBSTITUTE SOLVENTS?; It's About Time(ing); Technology-Forcing Regulations; 4.3REACH FOR THE STARS; 4.4BECOMING GLOBALLY HARMONIZED  
 Becoming Globally Harmonized in the US

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## Sommario/riassunto

High-precision cleaning is required across a wide range of sectors, including aerospace, defense, medical device manufacturing, pharmaceutical processing, semiconductor/electronics, etc. Cleaning parts and surfaces with solvents is simple, effective and low-cost. Although health and safety and environmental concerns come into play with the use of solvents, this book explores how safe and compliant solvent-based cleaning techniques can be implemented. A key to this is the selection of the right solvent. The author also examines a range of newer "green" solvent cleaning options.

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