Naphthalene Encyclopedia Article

Naphthalene

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

(c)1998-2002; (c)2002 by Gale. Gale is an imprint of The Gale Group, Inc., a division of Thomson Learning, Inc. Gale and Design and Thomson Learning are trademarks used herein under license.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites". (c)1994-2005, by Walton Beacham.

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers". (c)1994-2005, by Walton Beacham.

All other sections in this Literature Study Guide are owned and copyrighted by BookRags, Inc.

Contents

Naphthalene Encyclopedia Article.....1

Contents.....2

Naphthalene.....3

Naphthalene

Naphthalene is a white, crystalline solid at room **temperature** (melting point, 176°F/80°C) with a strong coal-tar odor. Soluble in **benzene**, absolute **alcohol**, and **ether**, it is derived either from boiling coal-tar oils with subsequent crystallization and **distillation**, or from petroleum fractions following various catalytic processing operations. Naphthalene is toxic when inhaled. It is used as a moth repellent, insecticide, **fungicide**, **lubricant**, preservative, and antiseptic. Naphthalene has the chemical formula is $C_{10}H_8$. Structurally, the **molecule** consists of two benzene rings fused in such a way that they share two **carbon** atoms. (Figure 1)

Auguste Laurent (1807-1853, working with Jean-Baptiste Dumas (1800-1884) in France, succeeded in preparing pure naphthalene from **coal** tar and in studying its halogen derivatives in 1831. Out of Laurent's studies of naphthalene arose the modern notion that all compounds can be thought of as being derived from hydrocarbons by substitutions, with the number of carbon atoms the sole basis for classification into a series.