

## Product Stewardship

From the methanol plant gate to the ultimate consumer, product stewardship is the central focus of the global methanol industry. For the methanol industry, product stewardship means ensuring the safe handling of methanol throughout the distribution chain, and also includes the proper use of methanol in any downstream applications.

Global production capacity is growing at an exponential rate, expected to reach over 85 million metric tons by 2012, making methanol one of the world's most widely distributed chemical commodities. The key to product stewardship is understanding the physical properties of methanol and the proper handling precautions that are necessary to ensure safety. Although it is a flammable and toxic substance, by following proper handling practices, methanol can be a safe and effective chemical and fuel. At the Methanol Institute (MI), our job is to communicate those safe handling guidelines across the global distribution chain and to the downstream customers.

With new market applications for methanol emerging every day, it is the responsibility of MI to help these new industries understand safe handling practices. Following an incident at a wastewater treatment plant involving a methanol storage tank, MI initiated an aggressive safety campaign with the Water Environment Federation to help facility operators safely use methanol to reduce harmful nitrogen loading of sensitive aquifers. With the National Biodiesel Board, MI launched an effort to assist commercial biodiesel producers and "backyard blenders" understand the risks and safe handling requirements for using methanol as a feedstock for this growing alternative fuel. MI also is working with fuel cell technology developers and consumer electronic companies to ensure that methanol fuel cartridges that will power the next generation of laptop computers and cellular phones are built to rigorous international safety standards.

MI maintains the world's most comprehensive database of methanol health effects and environmental impacts. This database has been made available to the U.S. Environmental Protection Agency, the United Nations Organization of Economic Co-operation and Development, and the International Council of Chemical Associations. Working with the Methanol Foundation, researchers at the University of Toronto are now conducting an extensive four-year research effort to better understand how methanol is metabolized. This data will help better understand the impact of exposure to methanol on human health.

