



## **Technical Brief**

# **Volatile Organic Compounds (VOC's)**

### **What are VOC's?**

The term 'volatile' refers to a solid or liquid that readily evaporates at a normal temperature. An organic compound is one based on carbon and hydrogen. Therefore, Volatile Organic Compounds are organic chemicals that easily evaporate at normal temperature and pressure. Many solvents, aerosol propellants, and petroleum distillates are VOC's.

### **Why are we concerned about VOC's?**

VOC's are an ingredient in the formation of ground-level ozone, also known as 'smog'. Smog contributes to respiratory problems for humans and animals, and extended exposure can lead to asthma, pneumonia and bronchitis. Peak smog levels typically occur during hot, dry, stagnant summertime conditions.

### **How are VOC's regulated?**

In Canada, there are no VOC regulations for Consumer and Commercial products currently in effect. Environment Canada is in the development phase concerning these regulations and is currently consulting industry with respect to key elements and standards for the regulations. CRC Canada has been an active participant in the consultation process.

In the United States, California was the first state, in 1989, to set VOC limits by product type and category. Since then, they have amended their regulation several times to include new product categories and to lower some previously established limits. Other groups of states have followed California's lead and have created 'Model' Consumer Products VOC Rules that can be adopted by member states. One group is called the Ozone Transport Commission (OTC) and includes Northeastern and Mid-Atlantic states. Another group is the Lake Michigan Air Directors Consortium and consists of states that border Lake Michigan. Some of these states adopted VOC regulations as early as 1/1/2005 and others are currently considering them. Environment Canada is studying closely the development of VOC regulations in the United States with a view to maintaining regulatory consistency throughout North America.

### **What is CRC Canada doing about VOC's?**

CRC Canada has been diligently following all regulatory developments regarding VOC's in order to provide compliant products for our customers. While many of our products already meet the VOC requirements in the United States, some have been reformulated to meet new requirements. CRC Canada will continue to be an active participant as Environment Canada moves closer to finalizing and implementing VOC regulations for Consumer and Commercial products.