

## HEAVY METAL FREE

The expression "heavy metal free" has gained favor to describe consumer or industrial articles. The implied meaning of this statement is that these identified products are safer for use than products that contain metals. However, the use of this expression is often confusing, in large part because there is no definitive meaning for the term. On the one hand, some chemical dictionaries define "heavy metal" to include any metal with a molecular weight heavier than sodium. On the other hand, the term is sometimes used to refer to metals such as cadmium, mercury, lead, and chromium. Generally, environmental laws have regulated specific metals. For example, the Resource Conservation and Recovery Act (RCRA) regulates certain materials that contain arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver. Further, from 1989 through 1996, the Coalition of Northeast Governors (CONEG) developed model legislation which focused attention on only four metals: cadmium, hexavalent chromium, lead and mercury.

The presence of metals in flexible vinyl generally results from the use of stabilizers and some pigments. The concentrations of any particular metal are dependent on formulation. Recycling vinyl introduces additional uncertainties regarding the possible presence of metals in the formulation. This uncertainty increases as this manufactured material with recycled content is, itself, recycled. It is important to recognize that total elimination may not be possible or economically viable. As analytical methods become more sophisticated, even minute trace amounts sometimes can be found in products to which no metals had been introduced. The use of such a non-precise term as "heavy metal

free" to describe products therefore creates confusion. In addition, use of such a term may shift focus away from those substances about which there may be valid concerns.

### RECOMMENDATION

The health and environmental issues associated with products use and disposal are a significant concern to both manufacturers and consumers. Risk communication is important but can only be effective when it is precise. The CFFA supports the use of precise language to provide a clear understanding of potential risks. The use of labels such as "heavy metal free" does not improve the awareness of risks and may actually cause confusion in the marketplace.

Therefore, any statement concerning the presence or absence of metals (or any other types of constituents) in a product should be precise and generally include reference to accepted and appropriate regulations, codes, or standards. Alternatively, a statement which identifies the product as free of specific metals may be appropriate and will provide more accurate information to consumers than any reference similar to "heavy metal free."

Claims that products are environmentally "friendly" or "green" have increased dramatically in recent years. CFFA believes that such claims should be carefully considered. Any claims must be clearly represented and based on scientifically sound information. Information presented in this manner will assist in minimizing consumer confusion and enhance product confidence.