

POTENTIALLY CARCINOGENIC SUBSTANCES

Chromium Compounds

Some trivalent and hexavalent chromium compounds have demonstrated potential health hazards to human organs and systems (Figure 10). Chromium in hexavalent combination with hydrogen, the alkali metals (e.g., sodium), ammonia and oxygen are considered noncarcinogenic. All other hexavalent combinations of chromium (e.g., lead and zinc chromates) are considered potentially carcinogenic. The primary concern for exposure is through inhalation, potentially causing lung cancer.

A number of Ford employees have potential exposure to these compounds by virtue of handling them primarily in paint making and application. Protective measures are employed so that regulated limits are not exceeded. The current statutory limits for all chromium compounds is 52 $\mu\text{g}/\text{m}^3$ although NIOSH has recommended lower levels (Figure 11).

The classes of materials included in Figure 12 are of current concern since the most critical sources of exposure are in paint manufacture and application.

May 27, 1980

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