

Changes made for the 2nd printing of the NIOSH Pocket Guide

Vendor list [page iii]

The fax number for Industrial Hygiene Services, Inc. was changed to (314) 726-6361.

Table 4 [page xxv]

In item 2 on that page we corrected the following typo: “99.7%” was changed to “99.97%.”

Calcium carbonate [page 46]

A new CAS# was added (471-34-1). After the existing CAS# (1317-65-3) we added “(natural)” and after the new CAS# we added “(synthetic).”

Calcium silicate [page 48]

“Wollastonite (mineral)” was deleted as a synonym for this chemical. It was also deleted from the Chemical, Synonym, and Trade Name Index on page 424.

Hexamethylene diisocyanate [page 161]

The vapor pressure (VP) was changed from 0.5 mm Hg to 0.05 mm Hg.

Hydrogen fluoride [page 168]

The relative gas density (R_{GasD}) was changed from 1.86 to 0.69.

Manganese compounds and fume [page 191]

In the list of symptoms in the ER, SY, TO section we deleted “Parkinson’s” and replaced it with “Manganism.”

Propylene glycol monomethyl ether [page 269]

A typo was corrected for the chemical formula. CH₃OCH₂CHCH₃ was changed to CH₃OCH₂CHOHCH₃.

Propylene oxide [page 270]

In the Incompatibilities and Reactivities section the following change was made. “Anhydrous metal chlorides” was deleted and replaced with “Anhydrous chlorides of iron, tin, and aluminum; peroxides of iron and aluminum; alkali metal hydroxides”

Silica, crystalline [page 278]

We added the cross symbol (†) after “OSHA PEL” in the Exposure Limits section.

Appendix C [page 346]

A new entry for Asphalt Fumes was added in Appendix C. Listed below is the text that was added.

The recommendations provided below are from *Health Effects of Occupational Exposure to Asphalt* [DHHS (NIOSH) Publication No. 2001-110] (<http://www.cdc.gov/niosh/01-110pd.html>).

Occupational exposure to asphalt fumes shall be controlled so that employees are not exposed to the airborne particulates at a concentration greater than 5 mg/m³, determined during any 15-minute period.

Data regarding the potential carcinogenicity of paving asphalt fumes in humans are limited, and no animal studies have examined the carcinogenic potential of either field- or laboratory-generated samples of paving asphalt fume condensates. NIOSH concludes that the collective data currently available from studies on paving asphalt provide insufficient evidence for an association between lung cancer and exposure to asphalt fumes during paving.

The results from epidemiologic studies indicate that roofers are at an increased risk of lung cancer, but it is uncertain whether this increase can be attributed to asphalt and/or to other exposures such as coal tar or asbestos. Data from experimental studies in animals and cultured mammalian cells indicate that laboratory-generated roofing asphalt fume condensates are genotoxic and cause skin tumors in mice when applied dermally. Furthermore, a known carcinogen (Benzo(a)pyrene) was detected in field-generated roofing fumes. The collective health and exposure data provide sufficient evidence for NIOSH to conclude that roofing asphalt fumes are a potential occupational carcinogen.

The available data indicate that although not all asphalt-based paint formulations may exert genotoxicity, some are genotoxic and carcinogenic in animals. No published data examine the carcinogenic potential of asphalt-based paints in humans, but NIOSH concludes that asphalt-based paints are potential occupational carcinogens.