**CHEMICALS MEETING THE CRITERIA FOR LISTING AS CAUSING CANCER VIA THE AUTHORITATIVE BODIES MECHANISM**

**PACKAGE 19b.3**
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Reproductive and Cancer Hazard Assessment Section
Office of Environmental Health Hazard Assessment
California Environmental Protection Agency

The chemical listed in the table below meets the criteria for listing under Proposition 65 via the authoritative bodies listing mechanism. The regulatory guidance for listing by this mechanism is set forth in Title 22, California Code of Regulations (CCR), Section 12306. For example, the regulations include provisions covering the criteria for evaluating the documentation and scientific findings by the authoritative body to determine whether listing under Proposition 65 is required.

The National Toxicology Program (NTP) is one of five institutions which have been identified as authoritative bodies for the purposes of Proposition 65 (22 CCR 12306(l)). NTP has identified the chemical in the table below as causing cancer. The Office of Environmental Health Hazard Assessment (OEHHA) has found that this chemical is "formally identified" as causing cancer according to the regulations covering this issue (22 CCR 12306(d)): The chemical below is the subject of a report published by the authoritative body which concludes that the chemical causes cancer. Also, the document specifically and accurately identifies the chemical and meets one or more of the criteria outlined in 22 CCR 12306(d)(2).

OEHHA also finds that the criteria given in regulation for "as causing cancer" (22 CCR 12306(e)) have been satisfied for the chemical in the table below. In making this evaluation, OEHHA relied upon the discussion of data by the authoritative body in making its findings that the specified chemical causes cancer. A brief discussion of the relevant carcinogenesis studies providing evidence for the findings is presented below. The statement in bold reflects data and conclusions that satisfy the criteria for the sufficiency of evidence for carcinogenicity (22 CCR 12306(e)). The full citation for the authoritative body document is given in this report.

| Chemical | CAS No. | Chemical Use | Reference |
|---|---|---|---|
| Naphthalene | 91-20-3 | Natural constituent of coal tar and crude oil; chemical intermediate in synthesis of phthalic and anthranilic acids, naphthols, naphthylamines, and synthetic resins; ingredient in some moth repellants and toilet bowl deodorants; used in veterinary medicine and as a bird repellant[1]. | NTP (2000) |

[1]Not currently registered in California.

Naphthalene (CAS No. 91-20-3)

**Increased incidence of a rare malignant tumor in male and female rats.**

NTP (2000) has concluded that there is clear evidence of the carcinogenic activity of naphthalene in male and female F344/N rats.

NTP (2000) exposed male and female F344/N rats to naphthalene by inhalation for two years. Neuroblastoma of the nasal olfactory epithelium, a rare malignant tumor in rodents, was observed in both male and female rats. In female rats, neuroblastomas of the olfactory epithelium were observed in all exposed groups (0/49, 2/49, 3/49 and 12/49 for control, low-[p=0.214], mid-[p=0.112], and high-dose [p<0.001] groups, respectively; p<0.001, Poly-3 trend test), and were significantly increased in high-dose animals. In male rats, the incidence of neuroblastomas of the olfactory epithelium was also increased (0/49, 0/49, 4/48 [p=0.056], 3/48 [p=0.109]) and occurred with a positive trend (p=0.027). Neuroblastomas have not been observed in male or female chamber control rats in the NTP historical database (for animals fed NIH-07 feed, 0/1048 (males) and 0/1044 (females); for animals fed NTP-2000 feed, 0/299 (males) and 0/299 (females)).

Statistically significant increases (p<0.01) in adenomas of the nasal respiratory epithelium were also observed in all exposed males (0/49, 6/49, 8/48, 15/48; p<0.001, Poly-3 trend test). In female rats, the incidence of adenomas of the nasal respiratory epithelium was also increased (0/49, 0/49, 4/49 [p=0.053], 2/49; p=0.066 Poly-3 trend test). This is also a rare neoplasm that has not been observed in NTP historical chamber control rats (for animals fed NIH-07 feed, 0/1048 (males) and 0/1044 (females); for animals fed NTP-2000 feed, 0/299 (males) and 0/299 (females)).

**REFERENCE**

National Toxicology Program (NTP, 2000). *Toxicology and Carcinogenesis Studies of Naphthalene (CAS No. 91-20-3) in F344/N Rats (Inhalation Studies).* NTP Technical Report Series No. 500. NIH Publication No. 01-4434. U.S. Department of Health and Human Services, NTP, Research Triangle Park, NC.