KOLORCURE

May 14, 1998

Dr. C.W. Jameson
National Toxicology Program Report on Carcinogens
MD-EC-14
P.O. Box 12233
Research Triangle Park, NC 27709

Dear Dr. Jameson:

Our company is a manufacturer of UV Inks and Coatings in a growing industry, the ultraviolet (UV) curing of polymeric materials. We are extremely concerned with the overall portrayal of UVA, UVB, and UVC in the National Toxicology Program's (NTP's) background document which supports NTP's recommendation to classify Solar Radiation and the Use of Sunlamps and Sunbeds as "known to be a human carcinogen." The background document is entitled *RC Draft Background Document for UV Radiation (September 29, 1997).*

The UV curing of polymeric materials is a widely used industrial process in a number of industries, including printing, packaging, automotive, optical fibre production, metal decorating, wood finishing and furniture. The UV equipment used in the industry is specifically designed to minimize the opportunity for incidental exposure in the work place, and is designed to meet all current casual exposure health standards. Major corporations in North America and around the world utilize this process and have considered it to be safe. Typically, a UV coating operation uses arc lamps and microwave-powered lamps or electodeless lamps with wavelengths that may range from 200 nm to 450 nm and into the range of visible light. Current equipment design and worker safety practices already incorporate several precautions to minimize and avoid direct exposure to UV. In addition, UV curing provides significant process advantages over conventional solvent-based and water-bourne techniques. Besides almost zero VOC emissions, the benefits of the UV curing process include lower energy consumption, less space, higher productivity, higher quality and appreciable value-added content to its users.

We understand from the Federal Register notice (63 Fed. Reg. 13418, (March 19, 1998)) that NTP intends for the "known to be a human carcinogen" classification to apply only to Solar Radiation and the Use of Sunlamps and Sunbeds. A review of the deliberations of NTP's Board of Scientific Counselors (October 30-31, 1997 meeting minutes) confirms that NTP intended to present an overview of the science in the background document, but stay focused, for purposes of the proposed classification, on the Use of Sunlamps and Sunbeds. Further, the Board's deliberations indicate that NTP intends for its classification to be consistent with the 1992 classification by the International Agency for Research on Cancer (IARC). In IARC's 1992 Monograph, its Group 1 "carcinogenic to humans" classification, which appears comparable to the NTP's "known to be human carcinogen" classification, is limited to "solar radiation."

UV is a crucial part of many accepted and safe commercial technologies, including UV coatings applications. Accordingly, The American Conference of Government Industrial Hygienists (ACGIH) has reviewed the science and established Threshold Level Values (TLV's) for occupational exposure to UV in the spectral region between 180 and 400 nm. These values represent conditions under which nearly all workers may be repeatedly exposed without adverse health effects. The TLVs apply to exposure of the eye or skin to UV from arcs, gas, and vapor discharges, and fluorescent, incandescent, and solar sources (ACGIH has separate TLV's for UV laser application).

We appreciate the NTP's review of the science in this area; however, in our view, the background document is not as accurate and precise as it needs to be to reflect NTP's true intent. If NTP is only issuing a classification for Solar Radiation and the Use of Sunlamps and Sunbeds. NTP should be very clear on this point in the background document.

In closing, we do not oppose the NTP's classification for Solar Radiation and the Use of Sunlamps and Sunbeds. We oppose this classification for *all* natural and artificial sources of UV. If the NTP intends a more narrow construct that is consistent with IARC, then the NTP recommendation on UV should be delayed until the executive summary and any other relevant portions of the background document are further revised. Otherwise, references to the background document could result in serious, unintended consequences for our industry. We appreciate your consideration of these comments.

Sincerely,
Kolorcure Corporation

Brian Templeman

Brian Templeman, President

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