

201-14494



NCIC HPV
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05/23/2003 09:53 AM

To: NCIC HPV, moran.matthew@epa.gov
cc:

Subject: Environmental Defense comments on Isodecyl Diphenyl Phosphate
(CAS # 29761-21-5)



Richard_Denison@environmentaldefense.org on 05/22/2003 10:28:28 AM

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Subject: Environmental Defense comments on Isodecyl Diphenyl Phosphate (CAS # 29761-21-5)

(Submitted via Internet 5/22/03 to oppt.ncic@epa.gov, hpv.chemrtk@epa.gov,
boswell.karen@epa.gov, chem.rtk@epa.gov, MTC@mchsi.com, and
olsona@ferro.com)

Environmental Defense appreciates this opportunity to submit comments on
the robust summary/test plan for Isodecyl Diphenyl Phosphate (CAS #
29761-21-5).

The Ferro Corporation, in response to the EPA High Production Volume
Challenge Program, has submitted a Robust Summary/Test Plan for isodecyl
diphenyl phosphate (IDP). According to the Test Plan, this chemical is a
flame retardant used in commercial resins, including polyvinyl chloride
(PVC) and its copolymers as well as polyvinyl acetate and acrylics.

Our review of this Robust Summary/Test Plan indicates both are quite
 cursory. A brief search found a total of 89 references that at least
 mention this chemical and yet very little research on IDP is cited here.
 No information is provided to describe production or transport of IDP and
 only a very general statement is provided to describe uses of this
 compound. According to literature cited in the Robust Summary of this
 submission, IDP may also be used as a plasticizer. Yet that fact is not
 mentioned in the Test Plan or Robust Summary. Surely the Ferro Corporation
 knows how its product is used and should be able to provide a great deal
 more information than it has regarding possible sources of human or
 environmental exposure. There is no mention of human exposure, either
 occupational or consumer, and no mention of whether or how this chemical
 might enter the environment. Further, although not stated in the Test Plan
 or Robust Summary, given the diverse uses of the polymers in which it is
 used, we suspect that IDP may be found in numerous consumer products.
 However, there is no mention of its use in consumer products.

It is also not stated whether IDP is a reactive or an additive flame
 retardant. This is important information because a reactive flame
 retardant reacts with the polymer and thus is chemically bound to the
 resin, whereas an additive flame retardant may leach out of the resin to
 result in human and environmental exposure. This and other most basic
 information should be included in this submission.

While Ferro proposes to generate additional data according to OECD
 guidelines, the additional work proposed appears to be the bare minimum.
 Existing data on animal toxicity are certainly minimal and the one study
 cited would not be considered adequate by today's standards. The limited
 data provided do indicate IDP has low toxicity to higher mammals.

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Therefore, we do not request animal testing other than that proposed.

In our opinion the cytotoxicity observed in the Fischer mouse lymphoma test, cited by the sponsor as a reason for not conducting further studies of genotoxicity, provides insufficient justification for the sponsor's proposal to forgo conducting Ames tests for this compound: The cytotoxicity cited was observed in animal cells and was observed only at the higher doses. These conditions and responses may not apply to bacteria used in the Ames test.

Other comments:

1. Data are readily available even on the Internet to address the SIDS requirements for melting point and boiling point, neither of which were provided in this submission.
2. The data available in the literature should be reviewed and summarized in the Test Plan.

In summary, we do not consider this Robust Summary/Test Plan sufficient to address the objectives of the HPV Challenge Program.

Thank you for this opportunity to comment.

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