

PMN substance in surface waters. Since significant environmental exposure is not expected as the PMN substance is not released to surface water above 2 ppb, as described in the PMN, EPA has not determined that the proposed manufacturing, processing, and use of the substance may present an unreasonable environmental risk. EPA has determined, however, that other uses of the substance resulting in release to surface water above 2 ppb may cause significant adverse environmental effects. Based on this information the PMN substance meets the concern criteria at § 721.170 (b)(1)(i)(C), (b)(3)(ii), and (b)(4)(ii).

Recommended testing: EPA has determined that the following acute aquatic toxicity tests would help to characterize the environmental effects: a fish acute toxicity study (OPPTS 850.1075 test guideline (public draft)), a daphnid acute toxicity study (OPPTS 850.1010 test guideline (public draft)), and an algal toxicity study (OPPTS 850.5400 test guideline (public draft)). The fish and daphnid tests should be conducted with flow-through methods and measured concentrations, dilution water total organic carbon TOC < 2.0 mg TOC/L. The algal test should be conducted with static methods and measured concentration. Dilution water hardness < 180.0 mg/L as CaCO₃. EPA has also determined that a prenatal developmental toxicity study by the oral route in two-species (OPPTS 870.3700 test guideline) would help to characterize the human health effects of the PMN substance.

CFR citation: 40 CFR 721.9520.

PMN Number P-00-0618

Chemical name: (generic) Substituted hydroxyalkane acetate.

CAS number: Not available.

Basis for action: The PMN substance will be used as described in the PMN. EPA has concerns for liver toxicity, kidney toxicity, and developmental toxicity based on a 28-day subchronic inhalation study in rats and a developmental toxicity study in rats for an analog of the PMN material; EPA identified concerns for neurotoxicity and carcinogenicity based on analog data. Since significant worker exposure is unlikely as inhalation exposure is not expected for the use described in the PMN, EPA has not determined that manufacturing, processing, and use of the substance as described in the PMN may present an unreasonable risk. EPA has determined, however, that use of the substance other than as described in the PMN may cause serious health effects. Based on this information the PMN substance meets the concern criteria at

§ 721.170 (b)(3)(i), (b)(3)(ii), and (b)(1)(i)(C).

Recommended testing: EPA has determined that a prenatal developmental toxicity study by the oral route in two species (OPPTS 870.3700 test guideline) and a 90-day inhalation toxicity study with a 60-day holding period (OPPTS 870.3465 test guideline) would help to characterize the human health effects of the PMN substance.

CFR citation: 40 CFR 721.532.

PMN Number P-00-0626

Chemical name: (generic) Acrylate of polymer based on isophorone diisocyanate.

CAS number: Not available.

Basis for action: The PMN substance will be used as an additive for inks and coatings. Based on structural analogy to acrylates, EPA is concerned that toxicity to aquatic organisms may occur at a concentration as low as 1 ppb of the PMN substance in surface waters. Since significant environmental exposure is not expected as the PMN substance is not released to surface water above 3 ppb, as described in the PMN, EPA has not determined that the proposed manufacturing, processing, and use of the substance may present an unreasonable environmental risk. EPA has determined, however, that other uses of the substance resulting in release to surface water above 3 ppb may cause significant adverse environmental effects. Based on this information the PMN substance meets the concern criteria at § 721.170(b)(4)(ii).

Recommended testing: EPA has determined that the following acute aquatic toxicity tests would help to characterize the environmental effects: a fish acute toxicity study (OPPTS 850.1075 test guideline (public draft)), a daphnid acute toxicity study (OPPTS 850.1010 test guideline (public draft)), and an algal toxicity study (OPPTS 850.5400 test guideline (public draft)). The fish and daphnid tests should be conducted with flow-through methods and measured concentrations. The algal test should be conducted with static methods and measured concentrations. Dilution water hardness < 180.0 mg/L as CaCO₃.

CFR citation: 40 CFR 721.463.

PMN Number P-00-0637

Chemical name: Methylum, triphenyl-, tetrakis(pentafluorophenyl)borate (I-).

CAS number: 136040-19-2.

Basis for action: The use of the substance is as described in the PMN. Based on structural analogy to organoborates, EPA is concerned that toxicity to aquatic organisms may occur at a concentration as low as 1 ppb of the PMN substance in surface waters. Since

significant environmental exposure is not expected, as the substance is not released to surface waters, as described in the PMN, EPA has not determined that the proposed manufacturing, processing, and use of the substance may present an unreasonable risk. EPA has determined, however, that other uses of the substance resulting in release to surface waters may cause significant adverse environmental effects. Based on this information the PMN substance meets the concern criteria at § 721.170(b)(4)(ii).

Recommended testing: EPA has determined that a fish acute toxicity study (OPPTS 850.1075 test guideline (public draft)), a daphnid acute toxicity study (OPPTS 850.1010 test guideline (public draft)), and an algal toxicity study (OPPTS 850.5400 test guideline (public draft)) would help to characterize the environmental effects of the PMN substance. The fish and daphnid tests should be conducted with flow-through methods and measured concentrations. The algal test should be conducted with static methods and measured concentrations. Dilution water hardness less than 180.0 mg/L as CaCO₃.

CFR citation: 40 CFR 721.5454.

PMN Number P-00-0638

Chemical name: (generic) Alkali metal salt of halogenated organoborate.

CAS number: Not available.

Basis for action: The use of the substance is as described in the PMN. Based on structural analogy to organoborates, EPA is concerned that toxicity to aquatic organisms may occur at a concentration as low as 3 ppb of the PMN substances in surface waters. Since significant environmental exposure is not expected, as the substance is not released to surface waters, as described in the PMN, EPA has not determined that the proposed manufacturing, processing, and use of the substance may present an unreasonable risk. EPA has determined, however, that other uses of the substance resulting in release to surface waters may cause significant adverse environmental effects. Based on this information the PMN substance meets the concern criteria at § 721.170(b)(4)(ii).

Recommended testing: EPA has determined that a fish acute toxicity study (OPPTS 850.1075 test guideline (public draft)), a daphnid acute toxicity study (OPPTS 850.1010 test guideline (public draft)), and an algal toxicity study (OPPTS 850.5400 test guideline (public draft)) would help to characterize the environmental effects of the PMN substance. The fish and