U.S. FOOD & DRUG ADMINISTRATION

Memorandum

Date: January 13, 2022

To: Laura Dye, Division of Food Contact Substances (HFS-275)
Through: Mariellen Pfeil, Lead Biologist, Environmental Team, Division of Science and Technology (HFS-255)

Mariellen Pfeil -S Digitally signed by Mariellen Pfeil -S Date: 2022.01.12 22:25:58 -05'00'

From: Antonetta Thompson-Wood, Physical Scientist, Environmental Team, Division of Science and Technology (HFS-255)

Subject: Finding of No Significant Impact (FONSI) for Food Contact Substance Notification (FCN) 2197: N,N'-dioleoylethylenediamine (CAS. Reg. No. 110-31-6)

Notifier: SK Functional Polymer S.A.S

Attached is the FONSI for FCN 2197, which is for the use of N,N'-dioleoylethylenediamine (CAS. Reg. No. 110-31-6) as a release agent in authorized copolymers of ethylene and methyl acrylate, complying with 21 CFR § 177.1340 (Ethylene-methyl acrylate copolymer resins), except for use in contact with infant formula and human milk. This FONSI explains how the Food and Drug Administration (FDA) has met the requirements under the National Environmental Policy Act (NEPA) for this FCN.

After this FCN becomes effective, copies of this FONSI, the notifier's environmental assessment (EA), dated December 20, 2021 may be made available to the public. We will post digital transcriptions of the FONSI, and the EA on the agency's public website.

Please let us know if there is any change in the identity or use of the food-contact substance.

Antonetta Thompson-wood -S Digitally signed by Antonetta Thompson-wood -S Date: 2022.01.12 20:20:27 -05'00'
Antonetta Thompson-Wood

Attachment: FONSI

cc: HFS-255 Thompson-Wood
File: FCN No. 2197

FINDING OF NO SIGNIFICANT IMPACT

Food Contact Substance Notification (FCN) 2197, submitted by SK Functional Polymer S.A.S for the use of N,N'-dioleoylethylenediamine (CAS. Reg. No. 110-31-6) as a release agent in authorized copolymers of ethylene and methyl acrylate, complying with 21 CFR § 177.1340 (Ethylene-methyl acrylate copolymer resins), except for use in contact with infant formula and human milk. The FCS is for at a level not to exceed 1,500 ppm in authorized treated copolymers. Treated copolymers may be used in——

(1) impact-modifier resins, where the treated copolymer comprises up to 20% of the resin in contact with all types of food under Conditions of Use (COU) A through H (A-H) as described in Table 2, or
(2) multilayer laminated structures, where the treated copolymer comprises up to 1.2 mil (30 µm) of single-use, laminated food-contact articles for all types of food except type V (i.e., low moisture fats and oils) under COU D through H (https://www.fda.gov/food/packaging-food-contact-substances-fcs/food-types-conditions-use-food-contact-substances, accessed 1/11/22).

The Office of Food Additive Safety has determined that allowing this notification to become effective will not significantly affect the quality of the human environment and, therefore, an environmental impact statement (EIS) will not be prepared. This finding is based on information submitted by the notifier in an environmental assessment (EA), dated December 20, 2022. The EA was prepared in accordance with 21 CFR 25.40. The EA is incorporated by reference in this Finding of No Significant Impact (FONSI) and is briefly summarized below.

The FCS is intended to be used as a release agent in copolymers of ethylene and methyl acrylate, complying with 21 CFR, §177.1340 'Ethylene-Methyl acrylate copolymer resins' except for use in contact with infant formula and human milk. The FCS is used as a component of finished food contact articles. The FCS is used as a release agent. The food contact articles include food packaging for both uses (impact modifier resins and multilayer laminated structures) and repeat-use articles such as kitchenware (spatulas, spoons ladles, etc) for only the impact modifier uses. Finished food-contact articles containing the FCS will be utilized in patterns corresponding to the national population density and will be widely distributed across the country. Disposal, recycling, and combustion rates of food contact articles manufactured with the FCS will correspond with The United States Environmental Protection Agency (US EPA) Advancing Sustainable Materials Management: 2018 Tables and Figures[1]. Post-consumer disposal of food-contact articles containing the FCS will be to landfills and municipal waste combustors (MWC) complying with 40 CFR Parts 258 and 60, respectively. No significant impact on the concentrations of and exposures to any substances in air, water, or soil are anticipated. Due to EPA's regulations governing landfills at 40 CFR Part 258, leaching into the environment by food-contact articles manufactured with the FCS is not anticipated. Further, because of the regulations at 40 CFR Part 60, and others, no significant impacts are expected from incineration of the FCS at MWCs. Thus, the use of the FCS as proposed is not expected to result in significant environmental impacts.

The EA also considered the impact of greenhouse gas (GHG) emissions. Based on information provided in a confidential attachment to the EA, the total estimated GHG emissions resulting from the combustion of food-contact articles manufactured with the FCS in this notification is below 25,000 metric tons CO2-e, the US EPA threshold for mandatory reporting of GHG emissions (40 CFR 98.2). Therefore, no significant environmental impacts are anticipated.

No net increase in the use of energy and resources from the use and disposal of food-contact articles manufactured with the FCS is expected. No mitigation measures are needed since no significant adverse environmental effects are expected from use and disposal of food-contact articles manufactured with the FCS, nor do we expect significant environmental impacts, which would necessitate alternative actions to those proposed in this FCN. The alternative to not allowing the FCN to become effective

[1] https://www.epa.gov/sites/default/files/2020-11/documents/2018_tables_and_figures_fnl_508.pdf

would be continued use of materials that the FCS would otherwise replace; therefore, this action would have no significant environmental impact.

As evaluated in the EA, the proposed use of the FCS as described in FCN 2197 will not significantly affect the human environment; therefore, an EIS will not be prepared.

Prepared by Antonetta Thompson-wood -S Digitally signed by Antonetta Thompson-wood -S Date: 2022.01.12 20:21:00 -05'00' Date: see electronic signature

Antonetta Thompson-Wood
Physical Scientist, Environmental Team
Office of Food Additive Safety
Center for Food Safety and Applied Nutrition
Food and Drug Administration

Approved by Mariellen Pfeil -S Digitally signed by Mariellen Pfeil -S Date: 2022.01.12 22:26:42 -05'00' Date: see electronic signature

Mariellen Pfeil
Lead Biologist, Environmental Team
Office of Food Additive Safety
Center for Food Safety and Applied Nutrition
Food and Drug Administration