

SAFETY IN FOOD PACKAGING: UNWRAPPING THE FACTS ON DI-ISONONYL PHTHALATE (DINP) AND DI-ISODECYL PHTHALATE (DIDP)

Risk – What is the probability of harm occurring?



Exposures[†] for high consumers (95th percentile), covering all European population groups (all countries, all surveys, all age groups), are far below the Tolerable Daily Intakes (TDI) set for phthalates authorized for use in food contact materials.



“The survey results indicate that the levels of these seven plasticisers [including DINP and DIDP] in Australian foods are generally low...and **no appreciable health risks have been identified** for the Australian population.”

“The risk assessment concluded that exposures to most chemicals used to produce food packaging are low and unlikely to pose a public health and safety concern.”



“There have been no studies to date which show any connection between human dietary exposure to phthalates and adverse health effects.”



Permitted as a plasticizer for food contact plastics (Annex 2) and for the production of packaging inks (Annex 10).



“...dietary exposure estimates showed **no risk to human health**. Migration of phthalates... into packaged food is not a food safety concern in New Zealand.”

[†] Note – estimates concern exposure from food containing phthalates from all sources, including food packaging, the environment etc.



FOOD SAFETY
AUTHORITY OF IRELAND
(2016)

“Exposure to phthalates was estimated to be low in both population groups [children aged 5-12 years and adults aged 18 years and over] and average as well as above average exposure to phthalates was found to be well below the respective TDIs set by EFSA.”



ENVIRONMENT AND
CLIMATE CHANGE
CANADA (2015)

For infants and children 6 months to 4 years of age, exposures to DINP from environmental media [dust and indoor air] and food were found to be 8,333 times **below** the lowest levels of concern.

For infants and children 6 months to 4 years of age, exposures to DIDP from environmental media [dust and indoor air] and food were found to be 42,802 times **below** the lowest levels of concern.

Environment and Climate Change Canada concludes that these margins are large enough to address uncertainties in the exposure and health effects database for DINP and DIDP.



EUROPEAN CHEMICALS
AGENCY (2013)

“...no risk is expected from combined exposure to DINP and DIDP for children exposed via food and the indoor environment.”



UK COMMITTEE ON
TOXICITY OF CHEMICALS
IN FOOD, CONSUMER
PRODUCTS AND THE
ENVIRONMENT (2011)

Overall the Committee concluded that levels of DINP and DIDP “that were found in samples from the 2007 [Total Dietary Study] TDS **do not indicate a risk to human health** from dietary exposure alone, either when the compounds are considered individually, or when they are assessed in combination.”

EFSA DRAFT: https://www.efsa.europa.eu/sites/default/files/consultation/consultation/Phthalates_in_plastic_FCM_draft_opinion_for_public_consultation.pdf

FSANZ: <https://www.foodstandards.gov.au/publications/Documents/Survey%20of%20plasticisers%20in%20Australian%20foods.pdf>

US FDA: <https://www.tandfonline.com/doi/full/10.1080/19440049.2018.1447695>

SWISS FSVO: <https://www.blv.admin.ch/emballeges>

NEW ZEALAND MPI: <https://www.mpi.govt.nz/dmsdocument/21871/loggedIn>

FSAI: Report on a Total Diet Study carried out by the Food Safety Authority of Ireland

CANADA: <http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=47F58AA5-1>, <https://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=D3FB0F30-1&wbdisable=false#Toc0931>

ECHA 2013: https://echa.europa.eu/documents/10162/13579/201308_echa_review_dinp_didp_final_report_en.pdf

UK COT: <https://cot.food.gov.uk/sites/default/files/cot/cotstatementphthalates201104.pdf>

201910-110