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Landmark US EPA Risk Evaluations on DINP and DIDP

After a four-year extensive risk assessment in the context of a Manufacturer Requested Risk Evaluation (MRRE), **US EPA has concluded that DINP & DIDP under the US Toxic Substances Control Act (TSCA) do not pose unreasonable risk of injury to human health for consumers, the general population, or the environment[1].**

For the industrial and commercial uses identified as a risk, the conclusions are based on conservative conditions that are not likely to exist in those settings. Globally, this is the 11th major assessment confirming the safety of **DINP** and **DIDP**.

In January 2025, the US Environmental Protection Agency (EPA), under the Biden administration, published the risk evaluations of **the high molecular weight phthalate plasticizers DINP** and **DIDP** under TSCA. EPA concluded that the use of **DINP** and **DIDP** does not pose an unreasonable risk for (i.e. safe for use under the conditions of the assessment):

- The general population including women of child-bearing age, infants, children and the elderly
- Consumers
- The environment
- The majority of industrial and commercial applications

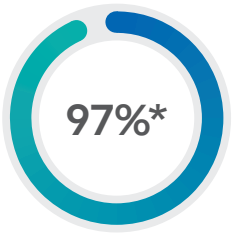
For **DINP**, **43 categories** of uses, including all **15 categories** of consumer uses, were identified as safe by EPA under TSCA. Only four industrial and commercial uses were identified as presenting an "unreasonable risk" to workers.

For **DIDP**, out of all **49 categories** of use evaluated, only six industrial and commercial uses were identified as presenting an "unreasonable risk" to workers. For both **DINP** and **DIDP**, the identification of uses presenting "unreasonable risk" were under conditions[4] not likely to exist in commercial and industrial settings where automation and personal protective equipment is routinely utilized.

US EPA has concluded

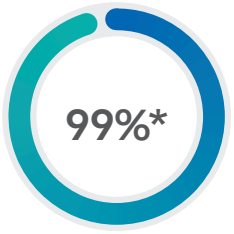
General population
SAFE FOR USE

The environment
SAFE FOR USE



DINP

- 43 uses out of 47 safe,[2]
- Representing 97% of production,
- EPA has concluded safe use



DIDP

- 43 uses out of 49 safe,[3]
- Representing 99% of production,
- EPA has concluded safe use

1 Including sensitive sub-populations such as women of child-bearing age, infants, children and the elderly.

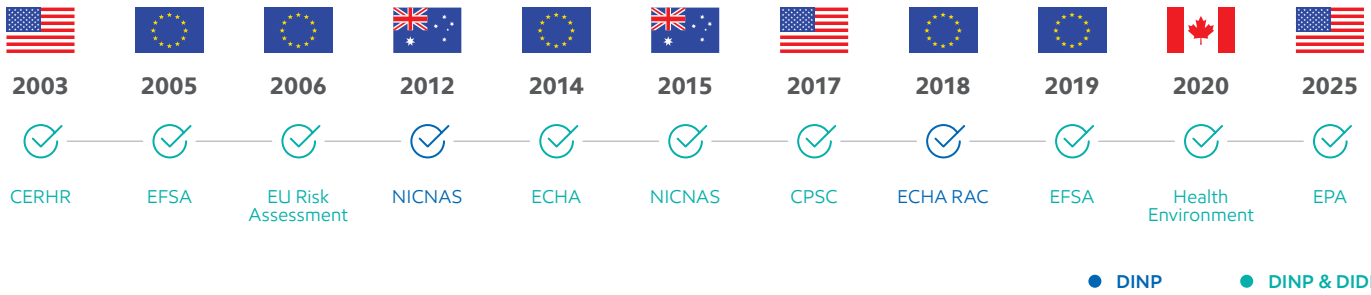
2 DINP uses identified as presenting an unreasonable risk to workers: Industrial spray-applied (i) adhesives and sealants, and (ii) paints and coatings. DINP uses identified as posing an unreasonable risk to workers include industrial spray-applied (i) adhesives and sealants, (ii) paints and coatings, as well as commercial spray-applied (iii) adhesives and sealants, and (iv) paints and coatings applications.

3 DIDP uses identified as presenting an unreasonable risk to workers include spray-applied industrial uses in (i)adhesives and sealants, and (ii) paint and coatings, as well as spray-applied commercial uses in (iii) adhesives and sealants, (iv) paint and coatings, (v)lacquers, stains, varnishes, floor finishes, and (vi) inspection fluids or penetrants.

4 Workers spraying high concentration products for 8 hours a day without protective equipment.

*The 3% and 1% in white in the DINP & DIDP pies correspond to the volume of each substance dedicated to applications listed under footnotes number 2 and 3, respectively.

A further assessment confirming safe use



The MRRE process under TSCA was launched upon the request of ExxonMobil and other manufacturers through the American Chemistry Council (ACC). As a responsible manufacturer, ExxonMobil was confident in the significant weight of scientific evidence supporting the safety of **DINP** & **DIDP**.

EPA's risk evaluation conclusions align with prior assessments of **DINP** & **DIDP** in other jurisdictions, which is that **DINP** & **DIDP** do not pose unreasonable risk of injury to human health for consumers, the general population, or the environment.

DINP and **DIDP** are some of the most thoroughly studied substances in the world and have been reviewed by numerous government regulatory agencies in the last 30 years, including the European Chemicals Agency (ECHA), the Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS), and Canada's Ministry of Environment and Climate Change and Ministry of Health.

While other assessments may reach different conclusions to some hazard statements in the US EPA risk evaluation (e.g. EU RAC Opinion on lack of reproductive effects of **DINP**) the overall conclusion on the lack of potential harm to reproduction and development in the general population is consistent with risk assessments in the EU and other jurisdictions for current uses.

Key uses evaluated as safe

Some of the sectors benefiting from the safe use of DINP & DIDP

DINP and DIDP are commonly used general-purpose plasticizers in technical and high resiliency applications like roofing, water proofing, car underbody coatings, and coated fabrics by major manufacturers. Jayflex™ high-molecular-weight plasticizers provide an optimum balance of properties with outstanding performance and permanence.

What comes next?

EPA has announced that they will begin the risk management process to address the select uses where there was an unreasonable risk determination. This may include analyzing existing practices and risk control measures at industrial sites (PPE, equipment uses, operational hours) for the applications where **DINP** and **DIDP** formulations are sprayed and which can be inhaled by workers.

Based on this, the EPA may decide whether additional regulatory risk management measures are needed.

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