

Continued Use of Articles Containing DecaBDE: Encouraging Responsible, Sustainable Business Practices



Meeting Regarding US EPA Final TSCA 6(h)/PBT Regulation

September 21, 2020

EPA's Final DecaBDE Rule Should Encourage Reuse and Recycling of Articles

Summary of iGPS's Message:

- EPA has actively supported the basic principles of “pollution prevention” which challenge us all to reuse and recycle materials and products to minimize creating unnecessary wastes. <https://www.epa.gov/americarecycles/us-national-recycling-goals>
- Consistent with EPA's national priorities and the Administration's goals in this regard, iGPS encourages EPA to use its TSCA rulemaking authorities, including its TSCA Section 6(a) and (h) obligations concerning persistent, bioaccumulative toxins (PBTs), to enable the responsible reuse and recycling of existing articles in commerce that have been manufactured using decaBDE.
- EPA's 2019 proposal with respect to decaBDE enables the continued use of existing articles that contained decaBDE and authorizes the recycling of such materials.
- iGPS supports a final rule that preserves and clarifies these key elements of the 2019 proposal.

Background



- Founded in 2007, iGPS is headquartered in Orlando, Florida
- Operator of the world's first plastic shipping pallet rental service
- iGPS does not manufacture decaBDE or produce pallets; rather, from 2007-2012 it purchased custom-designed pallets containing decaBDE to meet fire safety regulations
- Many of the world's most innovative and environmentally responsible companies use our pallets
- Working with our manufacturing and retailing partners, we are dramatically reducing costs and transforming the supply chain

The World's Most Advanced Pallet

Highest quality materials that are impervious to insects and, unlike multi-use wood pallets, cannot absorb bacteria or pathogens like Listeria, E. Coli, and Salmonella. Never needs chemical fumigation

100% top deck coverage, a more rigid and secure platform for cargo, allowing more goods per pallet



A business model built with Sustainability as a cornerstone. No more deforestation, no more pallets in landfills. If an iGPS pallet should become damaged, it will be remolded into new ones, making its useful life indefinite



The end of protruding nails and splinters that damage goods, put workers at risk and lead to costly repairs to material handling equipment

UL 2335 and FM 4996 certification, providing proven fire safety, with a significantly lower burn index than wood.



4 embedded RFID tags and our ISUM² middleware, provide true track-and-trace visibility across the supply chain and an end to dubious "lost pallet" charges

iGPS

LIGHTER STRONGER SAFER GREENER

Among Our Many Customers



Significantly Lighter Environmental Impact

When comparing the iGPS pallet and the typical multi-use wood pallet:

Abiotic Depletion ■ iGPS's pallet has 25% - 35% less impact

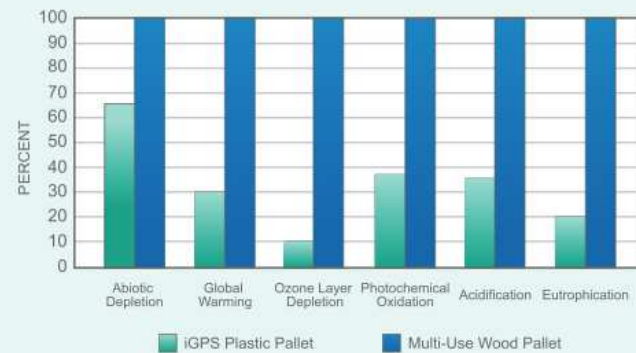
Global Warming ■ iGPS's pallet has 65% - 70% less impact

Ozone Layer Depletion ■ iGPS's pallet has 91% - 92% less impact

Photochemical Oxidation ■ iGPS's pallet has 60% - 65% less impact

Acidification ■ iGPS's pallet has 60% - 65% less impact

Eutrophication ■ iGPS's pallet has 75% - 80% less impact



Source: Life cycle analysis comparing iGPS plastic pallets with one-way and multi-use wood pallets, Environmental Resources Management, August, 2008

Benefits to Workers & Environment, Cost Savings for Manufacturers, Retailers

- Lighter and stronger pallets are safer for workers to handle as the pallets do not splinter or have nails
- Plastic pallets remain easier to clean, remain more sanitary, and do not harbor wood-boring pests
- iGPS pallets are captured and then completely recycled when damaged
- Switching from wood to iGPS saves manufacturers and retailers from \$2.76 -\$3.45 per load—a savings of up to 70% vs wood.

	Cost savings per pallet (\$/pallet)					
	Manufacturer		Transportation		Retailer	
General savings						
Reduced housekeeping labor and equipment	\$ 0.22	- \$ 0.25			\$ 0.22	- \$ 0.25
Reduced forklift maintenance and product falls	\$ 0.08	- \$ 0.08			\$ 0.08	- \$ 0.08
Reduced fees/restocking charges from retailer	\$ 0.09	- \$ 0.09			-	-
Other savings	\$ 0.09	- \$ 0.13			\$ 0.03	- \$ 0.07
Process related savings						
Reduced automated equipment downtime and maintenance	\$ 0.29	- \$ 0.37				
DC level savings for manufacturers with forward DCs	\$ 0.43	- \$ 0.52				
Product related savings						
Lower slipsheets usage	\$ 0.20	- \$ 0.20				
Lower product damage in DC and intransit	\$ 0.10	- \$ 0.13	\$ 0.03	- \$ 0.03	\$ 0.17	- \$ 0.21
Lower transportation costs from weighed out product			\$ 0.76	- \$ 1.05		
Total savings	\$ 1.49	- \$ 1.76	\$ 0.78	- \$ 1.08	\$ 0.49	- \$ 0.61

Source: Independent study by international consulting group.

Safe & Effective Use of Articles Containing DecaBDE Should Continue; EPA and the States Have Encouraged Responsible Recycling of DecaBDE Articles

- To meet strict fire safety standards, iGPS's original pallet fleet (~9 million pallets) contained small quantities (~3%) of decaBDE.
- iGPS's business model is environmentally sustainable; broken pallets are recycled into "new" pallets, using no additional decaBDE or other PBDE-flame retardant.
- EPA's 2009 negotiated decaBDE phase-out agreement between US EPA and the producers provides that all existing products containing decaBDE may continue to be used indefinitely and *may be recycled*.
- In addition, the Agency's 2012 proposed Significant New Use Rule addressing decaBDE specifically accommodated existing articles, their reuse, and recycling. 77 Fed. Reg. 19,862 (Apr. 2, 2012).
- State legislatures have incorporated exemptions in legislation restricting decaBDE to permit the continued use of existing articles as well as articles that contain decaBDE *due to recycled content*.

iGPS Recycling Extends the Useful Life of Pallets, Keeping DecaBDE Out of Landfills and the Environment

- In addition to being more durable, lighter, and easier to keep clean and free of invasive insect species, the original iGPS pallet fleet is environmentally sustainable.
 - Estimated life of average pallet: approximately 20 years.
 - Damaged pallets are retrieved, disassembled and then recycled into “new” pallets using no added decaBDE.
 - Approximately 1.5 M pallets have been recycled into “new” pallets using no new decaBDE.
 - Recycling pallet plastic and reusing pallets from the iGPS pool reduces waste and keeps the flame retardant out of landfills and the environment.
- New generation iGPS pallets do not contain decaBDE or any analogous flame retardant; but maintaining current pallet pool is a critical feature of the iGPS business model.

iGPS Supported EPA's 2019 Proposed PBT Rule Permitting Continued Use and Recycling of DecaBDE-containing Articles.

- iGPS submitted comments in support of the basic approach in the 2019 EPA TSCA Section proposed PBT rule for decaBDE.
 - Our October 21, 2019 comments can be located in the Agency's rulemaking docket here: https://downloads.regulations.gov/EPA-HQ-OPPT-2019-0080-0535/attachment_1.pdf iGPS did suggest EPA should make some technical clarifications when the final version of the rule is promulgated.
- A final rule that is not clear and specifically harmonized with these features of the proposal could unintentionally prohibit or inhibit recycling of articles containing decaBDE and unfortunately increase unnecessary disposal of such articles.
 - Such an outcome could ultimately increase, rather than decrease, environmental loading and releases of decaBDE.
- A final TSCA Section 6 rule for decaBDE also should meet the legal standard Congress established in the 2016 TSCA amendments when regulating risks attributed to chemicals embedded in articles.

To Act Under Section 6(h), EPA Must First Find a Risk Exposure to DecaBDE Under the Conditions of Use of iGPS Pallets

...the Administrator shall propose rules under subsection (a) with respect to a chemical substance...[when]...exposure ... under the conditions of use is likely to the general population or to a potentially exposed or susceptible subpopulation identified by the Administrator, or the environment, on the basis of an exposure and use assessment conducted by the Administrator.

Section 6(h)(1)(B)

In selecting among prohibitions and other restrictions, the Administrator shall apply such prohibitions or other restrictions to an article or category of articles containing the chemical substance or mixture only to the extent necessary to address the identified risks from exposure to the chemical substance or mixture from the article or category of articles so that the chemical substance or mixture does not present an unreasonable risk of injury to health or the environment

Section 6(c)(2)(E)

Data Provided to EPA Support a Finding that iGPS Pallets Do Not Present an Unreasonable Risk of Exposure to DecaBDE

“The results demonstrate that transfer of DBDPO from polymer pallet surfaces onto the surfaces of these consumer products did not occur at a measurable level under these conditions of storage and contact duration, temperature, and physical arrangement.”

“Also, DBDPO was not detectable in any consumer product samples analyzed, both before and after typical warehouse storage on iGPS polymer pallets.”

Environ International study, Industrial Hygiene Exposure Assessment and Dust Study for Decabromodiphenyloxide, Antimony Trioxide, and Trace Metals (Oct 2008)

“The conclusions of the industrial hygiene monitoring during manufacturing of pallet subunits, aggressive pallet handling, and the evaluation of surface levels resulting from such handling demonstrate that there are no occupational compliance issues identified and that surface levels of DBDPO on the pallets would not represent a health threat for sensitive individuals coming in contact with the pallets. “

Environ International study, Consumer Products Stored on Polymer Pallets Containing Decabromodiphenyloxide Evaluation of Potential Surface-to-Surface Transfer (Nov 2009)

Summary

iGPS encourages EPA to use its TSCA rulemaking authorities to encourage reuse and recycling of materials wherever possible throughout the value chain. This is consistent with long standing Agency policies, the Administration's National Recycling Goals, and will uphold commitments made in EPA's 2009 Phase-Out Agreement, and the Agency's Action Plan for PBDEs, as well as the standards established by the 2016 amendments to TSCA.

iGPS specifically asks that a final Section 6 PBT rule concerning decaBDE include terms that:

- Permit existing articles currently in commerce that contain decaBDE to remain in use;
- Encourage recycling practices that extend the useful life of decaBDE-containing articles when doing so keeps decaBDE out of landfills and the environment; and
- Clarify and codify the terms of the proposed Section 6 rule to remove any doubt that the final rule permits the continued use of *existing articles* that contain decaBDE and exempts from any prohibition “new” articles that contain decaBDE *due to the use of recycled content as a raw material*.

Thank you

