Understanding the 1-Bromopropane (1-BP) Draft Risk Evaluation

Ensuring the safety of chemicals is part of EPA’s mission of protecting public health and the environment. Under the Toxic Substances Control Act (TSCA), EPA evaluates chemical substances to determine whether they present unreasonable risks of injury to health or the environment.

This factsheet provides the public, businesses, and stakeholders with a clear picture of where EPA is in the risk evaluation process for 1-BP, whether the Agency has found any unreasonable risks and what that means for chemical safety, and what EPA’s next steps are.

Chemical Description

- 1-BP is used as a solvent, including in degreasing operations, spray adhesives and dry cleaning, in several industries. 1-BP is also used as reactant in the manufacturing of other chemical substances.
- Consumer uses of 1-BP include several applications including aerosol degreaser, spot cleaner and stain removers, and in insulation for building and construction materials.
- 2016 Chemical Data Reporting data shows the total manufactured volume, including imports, was nearly 26 million pounds of 1-BP in the U.S in 2015.

Conditions of Use Identified for Risk Evaluation

In the draft risk evaluation, EPA made draft risk determinations on 25 conditions of use associated with the manufacturing (including import), processing, distribution, use, and disposal of 1-BP. These uses include:

- Processing for incorporation into a formulation, mixture, or reaction product
- Processing as a reactant
- Industrial and commercial uses as solvents for cleaning or degreasing
- Industrial and commercial uses in adhesives and sealants
- Industrial and commercial uses in cleaning and furniture care products
- Other industrial and commercial uses, such as
  - Adhesive accelerant
  - Automotive care products
  - Mold cleaning and release products
  - Electronic products
- Consumer uses, such as aerosol spray degreaser, spot cleaners, liquid cleaners, adhesive accelerator, refrigerant flush, mold cleaning and insulation for building and construction materials.

Draft Risk Evaluation

TSCA requires EPA to evaluate chemical substances for unreasonable risks to health or the environment through a new risk evaluation process. In determining whether there is unreasonable risk, EPA weighs a variety of risk-related factors including, but not limited to, the effects of the chemical substance on health and human exposure to such substance under the conditions of use (including cancer and non-cancer risks), the effects of the chemical substance on the environment under the conditions of use, the population exposed (including potentially exposed or susceptible populations), the severity of hazard, and the uncertainties.

In the August 2019 draft 1-BP risk evaluation, EPA made the following initial determinations on risk. These initial determinations are not EPA’s final determinations on whether 1-BP presents unreasonable or no
unreasonable risks under the conditions of use. The initial determinations may change as EPA’s evaluation becomes more refined through feedback from the public- and peer-review processes.

- **Unreasonable risks to workers and occupational non-users (others in the general area of 1-BP use) under specific industrial and commercial uses.** EPA found unreasonable risks to workers and occupational non-users under specific conditions of use.
- **Unreasonable risks to consumers and bystander under specific consumer uses.** EPA found unreasonable risks to consumers and bystanders under specific conditions of use.
- **No unreasonable risk to workers, occupational non-users (others in the general area of 1-BP use), consumers, and bystanders under specific conditions of use.** EPA found no unreasonable risks to workers and occupational non-users under specific conditions of use associated with manufacturing, processing, disposal, and distribution.
- **No unreasonable risk to the environment.** For all the conditions of use included in the draft risk evaluation, EPA found no unreasonable risks to the environment from 1-BP.

**Public Participation**

The draft risk evaluation will be available for public comment for 60 days in docket EPA-HQ-OPPT-2019-0235. This public comment period is an opportunity for the public to submit any additional information to assist EPA in completing the final risk evaluation for 1-BP. EPA will consider all comments submitted on the draft risk evaluation when developing a final risk evaluation.

**Draft Risk Evaluation Highlights**

This draft risk evaluation and the initial risk determinations are not a final action. This draft presents the Agency’s preliminary conclusions, findings, and determinations on 1-BP and will be peer reviewed by independent scientific experts.

EPA is committed to being open and transparent as the Agency follows the process required by the law for evaluating potential risks from chemicals. Furthermore, EPA is going beyond what TSCA requires by going through the peer review process for each risk evaluation it releases in order to increase public transparency in the risk evaluation process. EPA will continue to keep the public updated as the Agency moves through this process. Following the comprehensive risk evaluation process required by TSCA ensures that EPA has confidence in our final conclusions about whether a chemical substance poses any unreasonable risks under the conditions of use, so the public can have confidence in the safety of chemicals on the market.

The next step in the risk evaluation process is public participation. EPA is asking the public and peer reviewers to provide input on the draft risk evaluations to ensure that the Agency is using the best available science and making decisions based on the weight of scientific evidence.

EPA’s risk findings may change in response to comments from scientific experts conducting a peer review and from the public on the draft risk evaluation. If EPA’s final risk evaluation for 1-BP finds unreasonable risks associated with this chemical substance under any conditions of use, the Agency will propose actions to address those risks within the timeframe required by TSCA.