A map of the United States with the southeastern region highlighted in green. The highlighted area includes Virginia, North Carolina, South Carolina, Georgia, Florida, and Alabama. The text "US EPA Pollution Prevention Program" is centered over this green area.

# US EPA Pollution Prevention Program

**Christina Bitten**

**P2 Program Coordinator, EPA Region 4**

**October 5<sup>th</sup>, 2021**



# The P2 Grants Program

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- Established in 1990 to provide technical assistance to businesses in order to reduce, eliminate or prevent pollution at its source.
- Between 2011-2019, the EPA's P2 Program issued 451 grants for \$48.8 million, which helped American businesses identify, develop, and adopt P2 approaches resulting in the following benefits:



**\$1.9 BILLION**

dollars savings for business



**706 MILLION POUNDS**

hazardous materials reduced



**40.4 BILLION GALLONS**

water saved



**16.9 MILLION METRIC TONS**

greenhouse gases eliminated



**25.9 BILLION KILOWATT HOURS**

energy savings

# Current Region 4 P2 Technical Assistance Providers

- University of Alabama
- Florida Department of Environmental Protection
- Georgia Tech
- Kentucky Department for Environmental Protection;  
Kentucky Pollution Prevention Center @ U of L
- Mississippi Department of Environmental Quality
- North Carolina Department of Environmental Quality
- Clemson University
- East Carolina University
- Tennessee Department for Environment and Conservation
- University of Tennessee





## P2 Awards Program

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- Opportunity to recognize businesses that have shown excellence and innovation in P2 practices.
- Annual, voluntary, and non-monetary award
- Organizations (businesses, companies, facilities, etc.) within EPA Region 4 are eligible to apply for a 2021 Award.
- Applications and nominations will be accepted through **October 19, 2021**.
- [Region 4 P2 awards webpage](#)

# Additional Programs Associated with P2

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## 1. Safer Choice

➤ <https://www.epa.gov/saferchoice>

## 2. Environmentally Preferable Purchasing (EPP) Program

➤ <https://www.epa.gov/greenerproducts>

## 3. Toxics Release Inventory (TRI) Program

➤ <https://www.epa.gov/toxics-release-inventory-tri-program>

## 4. Green Chemistry

➤ <https://www.epa.gov/greenchemistry>





# EPA's Safer Choice Program

October 2021

# Outline



- Safer Choice
  - The Safer Choice label
  - Safer Choice Standard
  - Product & chemical review process
- Safer Chemical Ingredients List (SCIL)
- Design for the Environment (DfE) for antimicrobials
- Partner of the Year Awards

# The Safer Choice label



- Verification by a federal government agency that products contain only safer chemical ingredients and that they:
  - Are safer for families, pets, communities, and the environment
  - Meet verified performance standards
  - Facilitate rapid decision-making
- About 1,950 certified products
  - ~400 Fragrance-free



# A Family of Labels



Optional Label for  
Industrial &  
Institutional Use



Fragrance-Free  
Label

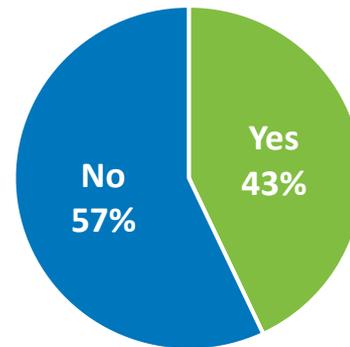
# Survey of Consumer Awareness



In a survey of 2,000+ adult U.S. residents in February 2020:

- 43% of consumers reported familiarity with the program.

Are you familiar with a labeling program implemented by EPA that enables consumers to select products...safer for people, families, and pets?



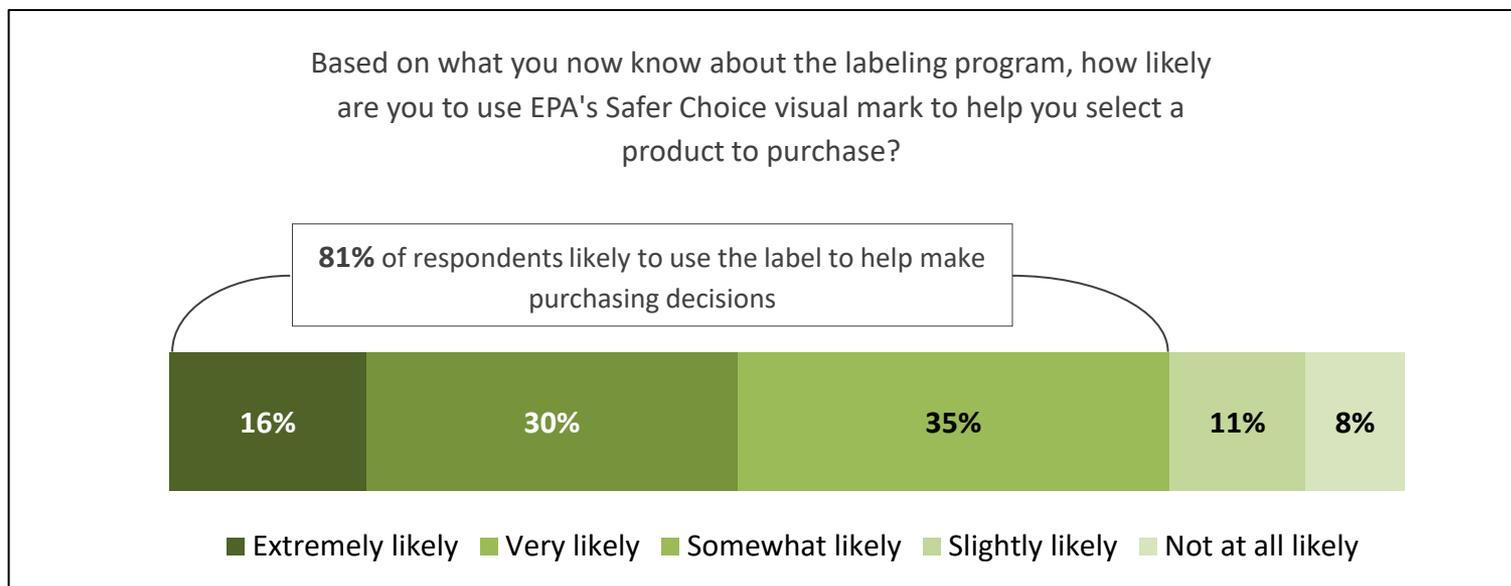
N=2,007

- 37% of consumers say they have seen the Safer Choice label on store shelves.

# Consumer Desire to use Safer Choice



- **81%** of consumers... responded that they would use the Safer Choice label to inform purchasing decisions.
  - **89%** of parents...
  - **87%** of millennials...



# Safer Choice Product Types



- **Household & Facility Cleaning**
  - All-Purpose Cleaners, Appliance Cleaners & Rinse Aids
  - Automatic Dishwasher Products
  - Carpet Cleaners & Floor Care Products
  - Degreasers
  - Dish Detergents & Soaps
  - Granite/Stone/Wood/Leather Cleaners
  - Kitchen/Countertop Cleaners
  - Laundry Detergents, Fabric Softeners & Pre-Treatments
  - Odor Removers
  - Pet Care Products
  - Toilet Bowl Cleaners
  - Tub/Tile Cleaners
  - Window/Glass Cleaners
- **Health & Beauty**
  - Hand Soaps
- **Automotive & Outdoor**
  - Aircraft Cleaning Products
  - Athletic Field Paint
  - Car Care Products
  - Deicers
  - Dust Control Products
  - HVAC Maintenance
  - Marine/RV Cleaners
  - Outdoor Furniture Cleaners
  - Parts Washers
- **FIFRA Disinfectants**
  - (Certified under DfE)

# The Standard Behind the Safer Choice Label

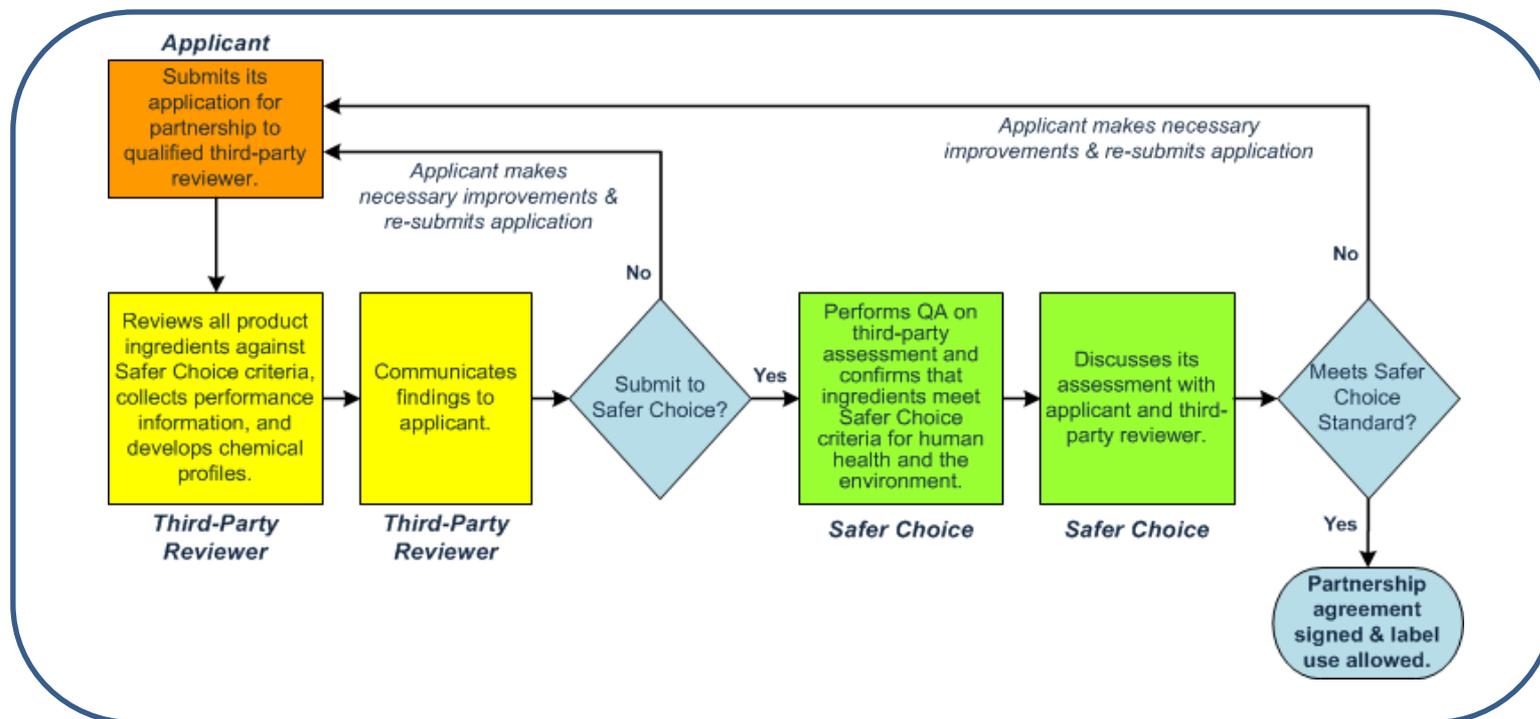


*To be Safer Choice certified, products must:*

- Meet the Safer Choice Standard
  - Every chemical ingredient is reviewed for human health and environmental safety
  - Product level requirements include: performance, packaging, and ingredient disclosure
- Be covered under a Partnership Agreement between the manufacturer and EPA
  - Renewed every 3 years
- Undergo annual audits

<http://www.epa.gov/saferchoice/standard>

# Safer Choice Product Review & Audits are Leveraged through Qualified Third Parties



**Third-Party Reviewers:** Gradient  
NSF International  
ToxServices LLC

**EPA Safer Choice has final review and grants certification**

# Safer Chemical Criteria



Every chemical is evaluated under relevant criteria (colorants, surfactants, master criteria, etc.)

- **No *de minimis*** for added ingredients
- Impurities, residuals, preservatives, & stabilizers are all considered
- Every material, including fragrance material, must be disclosed and meet criteria

# Safer Chemical Criteria (cont.)



A Safer Choice toxicological profile for a single chemical ingredient includes available data on:

- Physical-chemical properties
- Toxicity information on required endpoints

Human Health Effects	Environmental Fate & Toxicity
<ul style="list-style-type: none"><li>• Carcinogenicity</li><li>• Mutagenicity</li><li>• Reproductive &amp; developmental toxicity</li><li>• Acute toxicity</li><li>• Repeated dose toxicity</li><li>• Neurotoxicity</li><li>• Sensitization &amp; irritation</li></ul>	<ul style="list-style-type: none"><li>• Bioaccumulation</li><li>• Persistence</li><li>• Eutrophication</li><li>• Aquatic toxicity</li></ul>

# Safer Chemical Ingredients List (SCIL)



[www.epa.gov/saferchoice/safer-ingredients](http://www.epa.gov/saferchoice/safer-ingredients)

- Living list of more than **1,000** safer chemicals that meet EPA's Safer Chemical Criteria
- Uses
  - Research whether proposed formulations might be eligible for Safer Choice
  - Sustainable chemistry measure for products not carrying the Safer Choice label
  - Highlight innovation and meet demand for safer chemicals

## Safer Chemical Ingredients List

- The listed chemicals are safer alternatives, grouped by their [functional-use class](#).†
- Chemicals are marked as a  [green circle](#),  [green half-circle](#),  [yellow triangle](#), or  [grey square](#).‡
- This list includes many of the chemicals evaluated through the Safer Choice Program. It does not include confidential chemicals. There may be chemicals not included in this list that are also safer.
- Some of the chemicals listed in these functional use classes may not be on the [TSCA inventory](#) and therefore may not be authorized/allowed for TSCA uses. Persons considering TSCA uses for these substances should engage in appropriate diligence to ascertain whether such use is authorized.

◆ Please Select: [All Functional Use Classes](#)

[www.epa.gov/saferchoice/safer-ingredients](http://www.epa.gov/saferchoice/safer-ingredients)

◆ or Select a Functional Use Class:

- [Antimicrobial Actives](#)
- [Chelating Agents](#)
- [Colorants](#)
- [Defoamers](#)
- [Emollients](#)
- [Enzymes and Enzyme Stabilizers](#)
- [Fragrances](#)
- [Oxidants and Oxidant Stabilizers](#)
- [Polymers](#)
- [Preservatives and Antioxidants](#)
- [Processing Aids and Additives](#)
- [Skin Conditioning Agents](#)
- [Solvents](#)
- [Specialized Industrial Chemicals](#)
- [Surfactants](#)
- [Uncategorized](#)

**Functional Use Classes**

◆ Search: Name  or CAS RN

← **Search by Name or CAS #**

# Safer Chemical Ingredients List

## Color Codes



-  **Green circle** - low hazard based on experimental or modeled data.
-  **Green half-circle** - expected to be of low hazard based on experimental or modeled data. Additional data would strengthen our confidence in the chemical's status
-  **Yellow triangle** - met Safer Choice criteria for its functional ingredient class, but has some hazard profile issues.

# DfE Application Process Overview



# Antimicrobial Actives Allowed



- Eight active ingredients currently allowed:
  - Citric acid
  - Hydrogen peroxide
  - L-Lactic acid
  - Ethanol
  - Isopropanol
  - Peroxyacetic acid
  - Sodium bisulfate
  - Chitosan
  
- Living list – actives can be added if shown to meet Safer Choice master criteria
  - Interested parties should contact OPPT-Safer Choice to have their candidate active ingredients reviewed against program criteria
  - Successful candidates should be submitted to OPP/AD-DfE
  - Candidates that meet both programs' criteria will be listed as new actives

# DfE-Certified Products



- User-friendly and searchable list.

[www.epa.gov/pesticide-labels/dfe-certified-disinfectants](http://www.epa.gov/pesticide-labels/dfe-certified-disinfectants)

- **34** sanitizers/disinfectants certified
  - 11 primary product registrations
  - 23 supplemental distributor registrations

- Product sectors include:

- All-Purpose Cleaners
- Toilet Bowl Cleaners
- Tub/Tile Cleaners
- Wipes

Note: if the primary product is not approved for the DfE logo, then the supplemental distributor could not support the DfE logo on their label

# Safer Choice

## DfE-Certified Disinfectants

[Browse the list of DfE-certified disinfectants.](#)



Look for the Label!



EN ESPAÑOL

Safer Choice helps consumers, businesses, and purchasers find products that perform and contain ingredients that are safer for human health and the environment. Safer Choice is an EPA Pollution Prevention (PP) program, which includes practices that reduce, eliminate,

# DfE-Certified Disinfectants

The Design for the Environment (DfE) label helps consumers and purchasers find antimicrobial products, like disinfectants and sanitizers, that have been reviewed by EPA and found to meet both the pesticide registration requirements and the [standard for DfE-certified products](#). These products contain ingredients that have been reviewed for both human health and environmental fate. Learn more about the [DfE label for antimicrobial pesticide products](#), including information on how to obtain this certification for your products.



The following products have been qualified to display the DfE logo on the product label. Inclusion on this list does not constitute an endorsement by EPA.

## Search DfE-Certified Disinfectants

EPA Reg. Number, Product, or Company

Product Type



Active Ingredient



Home or Business Use



Show only:

[Disinfectants for use against the coronavirus SARS-CoV-2 \(COVID-19\)](#)

Show  entries

Previous

1

2

Next

EPA Reg. Number	Product	Company	Sector	Type	Active Ingredient
<a href="#">84368-1</a>	UrthPRO	UrthTech, LLC	Both	Other	Ethanol
				All-	Hydrogen

## Search DfE-Certified Disinfectants

EPA Reg. Number, Product, or Company

Product Type

Active Ingredient

Home or Business Use

Show only:

Disinfectants for use against the coronavirus SARS-CoV-2 (COVID-19)<sup>[1]</sup>

DfE-certified products  
also on List N

Show  entries

Previous

1

Next

EPA Reg. Number	Product	Company	Sector	Type	Active Ingredient
<a href="#">84368-1</a>	UrthPRO	UrthTech, LLC	Both	Other	Ethanol
<a href="#">84368-1-84150</a>	PURELL Professional Surface Disinfectant	GOJO Industries, Inc.	Business	Other	Ethanol
<a href="#">84368-1-84150</a>	PURELL Professional Food Service Surface Sanitizer	GOJO Industries, Inc.	Business	Other	Ethanol
<a href="#">84368-1-84150</a>	PURELL Healthcare Surface Disinfectant	GOJO Industries, Inc.	Business	Other	Ethanol
<a href="#">777-126</a>	Lysol Brand Kills 99.9% of Viruses & Bacteria "Power & Free" Multi-Purpose Cleaner w/ Hydrogen Peroxide Citrus Sparkle Zest	Reckitt-Benckiser	Home	All-Purpose Cleaners	Hydrogen Peroxide
<a href="#">34810-37-92388</a>	Lemi Shine Disinfecting Wipes	Envirocon Technologies, Inc.	Home	All-Purpose Cleaners	Citric Acid
<a href="#">34810-35-82206</a>	ECOS PRO Multi-Surface Disinfectant & Sanitizer, fresh citrus	US Nonwovens	Business	All-Purpose Cleaners	Citric Acid
<a href="#">34810-37-82206</a>	ECOS Multi-Purpose Disinfectant Wipes, fresh citrus	US Nonwovens	Home	All-Purpose Cleaners	Citric Acid
<a href="#">34810-35-</a>	ECOS Multi-Purpose Disinfectant & Sanitizer, fresh citrus	US Nonwovens	Home	All-Purpose	Citric Acid

# 7<sup>th</sup> Annual Safer Choice Partner of the Year (PoY) Awards



- Purpose: to recognize leadership contributions of Safer Choice partners and stakeholders who have shown achievement in the design, manufacture, selection, and use of products with safer chemicals, that further outstanding or innovative source reduction.
- EPA especially encourages submission of applications that show how the applicant's work promotes environmental justice, bolsters resilience to the impacts of climate change, results in cleaner air or water, or improves drinking water quality.
- Program participants eligible for PoY awards
  - Product manufacturers
  - Chemical manufacturers
  - Retailers
  - Purchasers & Distributors
  - Other Stakeholders



# Partner of the Year Award Winners



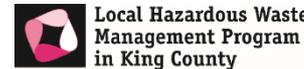
american cleaning institute®  
for better living



Preparing people to lead extraordinary lives



HEALTH • HYGIENE • HOME



U.S. Sustainable Acquisition and Materials Management Practices (SAMM) Working Group



GREENSTAR HI



STARCO GROUP



# Websites



- Safer Choice home page: <https://www.epa.gov/saferchoice>
- Safer Choice home page en español: <https://espanol.epa.gov/saferchoice>
- Safer Choice-certified product listing: <https://www.epa.gov/saferchoice/products>
- Safer Choice Standard: <https://www.epa.gov/saferchoice/safer-choice-standard>
- Safer Chemical Ingredients List (SCIL): <https://www.epa.gov/saferchoice/safer-ingredients>
- DfE-certified disinfectants product listing: <https://www.epa.gov/pesticide-labels/dfe-certified-disinfectants>

# Questions?



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202-564-0376

*Mention of trade names or commercial products should not be interpreted as an endorsement by EPA.*