



April 2015

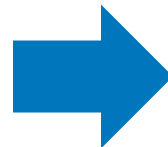


Safer Choice Program

(Formerly Design for the Environment)

NAME AND LABEL CHANGE

Safer Choice Program was formerly known as the Design for the Environment (DfE) Safer Product Labeling Program



View EPA Administrator Gina McCarthy's Video: <http://youtu.be/Pc4DWqFlqMo>



WHY WE REDESIGNED THE LABEL

- To better convey the scientific rigor and benefits of the program (e.g., safer for human health) with a label that is easier to display on products, materials, and in digital media
- To increase consumer and industrial/institutional purchaser recognition of products bearing EPA's Safer Product Label
- To encourage innovation and development of safer chemicals and chemical-based products
- At the request of partner companies & stakeholders



CONTENTS

- Safer Choice Program
 - 1) Safer Choice Label
 - 2) Safer Chemical Ingredients List (SCIL)
 - SCIL Review Process
- Potential Benefits to National Organic Program
- DfE/OPP Pesticide Pilot Project
- Conclusions

SAFER CHOICE LABEL

- More than **2,000** safer products / about **500** partners
- Range of product categories, including:
 - Predominantly laundry & cleaning products
 - Smaller percentage includes floor care, deicers, holding tank treatments and fire suppressants
- Potential for expansion to:
 - Personal care products, adhesives, lubricants, and more



WHAT DOES THE SAFER CHOICE LABEL MEAN

To use the label products must:

- Meet the Safer Choice Standards
 - Ingredient-level: human health and environmental criteria
 - Product level: performance, packaging, and ingredient disclosure
- Be covered under a Partnership Agreement between the manufacturer and EPA
 - Good for 3 years
- Undergo annual audits



Introducing our new Safer Choice label!



Safer Choice helps consumers, businesses, and purchasers find products that perform well and are safer for human health and the environment.



The Safer Choice Label

- [Learn About Safer Choice](#)
- [Resources for Manufacturers](#)
- [Safer Choice Standard](#)



Find Safer Products

- [Browse the Full Product Listing](#)
- [Find Safer Choices to Use in Your Community](#)



Safer Chemical List

- [Safer Chemical Ingredients List \(SCIL\)](#)
- [How to List on SCIL](#)



Related Programs

- [Design for the Environment \(DfE\) Alternatives Assessments](#)
- [DfE Life-Cycle Assessments](#)
- [DfE for Pesticides](#)

Find Safer Choice Products

e.g. company or product



[All-Purpose Cleaners](#)



[Car Care Products](#)



[Dish Soaps](#)



[Floor Cleaners](#)



[Laundry Products](#)



[Tub and Tile Cleaners](#)



Resources for
Manufacturers

Partner of the Year
Awards

Search Safer Choice
Products

For Use in Your
Community

Safer Chemical Ingredients
List

How to List on SCIL

Safer Choice Standard and
Criteria

Related Programs

DfE Alternatives
Assessments

DfE Life-Cycle
Assessments

DfE for Pesticides

Safer Detergents
Stewardship Initiative

Program History

Connect with Safer Choice

On this page:

- [Safer Chemical Ingredients List](#)
- [Overview of the Safer Chemical Ingredients List](#)
- [Technical notes about about the list](#)
- [Additional resources](#)

Related Information

For chemical manufacturers and raw material suppliers looking for information on how to list a chemical on the Safer Chemical Ingredients List (SCIL), [visit our step-by-step guide.](#)

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.

[+ Expand all](#)

- › Antimicrobial Actives
- › Chelating Agents
- › Colorants
- › Defoamers
- › Enzymes and Enzyme Stabilizers
- › Fragrances
- › Oxidants and Oxidant Stabilizers
- › Polymers
- › Preservatives and Antioxidants
- › Processing Aids and Additives
- › Solvents
- › Specialized Industrial Chemicals
- › Surfactants
- › Uncategorized



> Surfactants

Evaluated chemicals that meet [Safer Choice Safer Surfactant Criteria](#)

↕ Common Name	CAS Registry Number
● 1-Dodecanesulfonic acid, hydroxy-, sodium salt	128824-30-6
● 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., inner salts	147170-44-3
● 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., chlorides, sodium salts	61789-39-7
● 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., inner salts	61789-40-0
● 1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(1-oxodecyl)amino]-, inner salt	73772-45-9
● 1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(1-oxooctyl)amino]-, inner salt	73772-46-0
● Alcohols, C10-12, ethoxylated propoxylated	68154-97-2
● Alcohols, C10-14, ethoxylated	66455-15-0
● Alcohols, C10-16, ethoxylated	68002-97-1
● Alcohols, C10-16, ethoxylated propoxylated	69227-22-1
● Alcohols, C11-15-secondary, ethoxylated	68131-40-8
● Alcohols, C12-13, ethoxylated	66455-14-9
● Alcohols, C12-14, ethoxylated	68439-50-9



CRITERIA FOR SAFER CHEMICAL INGREDIENTS

- Define toxicological thresholds and supporting data required to determine which ingredients are the safest
- Criteria for functional ingredient classes:
 - Chelating Agents
 - Colorants
 - Defoamers
 - Enzymes & Enzyme Stabilizers
 - Fragrances
 - Oxidant & Oxidant Stabilizers
 - Polymers
 - Preservatives & Antioxidants
 - Processing Aids & Additives
 - Solvents
 - Surfactants



CHEMICAL HAZARD ENDPOINTS

Human Health Effects

- Carcinogenicity
- Mutagenicity
- Reproductive and developmental toxicity
- Neurotoxicity
- Acute and Repeated dose toxicity
- Respiratory sensitization
- Skin sensitization

Environmental Fate and Toxicity

- Persistence
- Bioaccumulation
- Degradation products
- Eutrophication
- Aquatic toxicity
- Others (i.e. non-guideline organisms)



VALUE OF THE SAFER CHOICE STANDARD

Ensures the use of safer chemicals

- Chemicals that are not allowed:
 - Identified through authoritative lists
 - Analogs to chemicals on authoritative lists
 - Chemicals with No Data
- Chemicals that are allowed:
 - Criteria for Safer Ingredients
 - Data are required to meet these criteria



SAMPLE OF AUTHORITATIVE LISTS

Authoritative Sources Indicating Carcinogenic Mutagenic Reproductive Toxicity (CMR):

- International Agency for Research on Cancer (IARC)
- US EPA. [Integrated Risk Information System \(IRIS\)](#),
- California Office of Environmental Health Hazard Assessment (OEHHA).
- European Commission Hazard Phrases ([Annex VI to the CLP Regulation](#)) or Risk Phrases [Annex VI to the DSD Regulation](#) - indicating possible carcinogenic, mutagenic, or reproductive toxicity

Authoritative Sources Indicating Persistent Bioaccumulative Toxic (PBT):

- US EPA. [Toxic Release Inventory \(TRI\)](#).
- EU REACH. [Substances of Very High Concern due to PBT, vPvB, or vPvT](#).
- Stockholm Convention [Persistent Organic Pollutants \(POPs\)](#).
- OSPAR List of Substances of Possible Concern. [Hazardous Substances List - Sections A-D](#).
- Chemicals determined to exceed [Safer Choice's thresholds for persistence, bioaccumulation, and aquatic toxicity](#) when addressed through the [TSCA Work Plan Chemical](#) process.

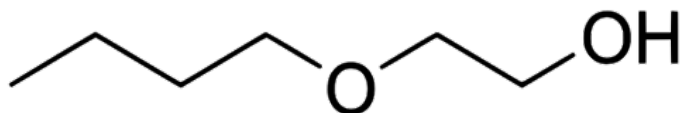
Respiratory Sensitizers:

- European Commission Hazard Phrases ([Annex VI to the CLP Regulation](#)) or Risk Phrases ([Annex VI to the DSD Regulation](#)) indicating possible respiratory sensitization: H334, R42.

Dermal Sensitizers: 2 lists

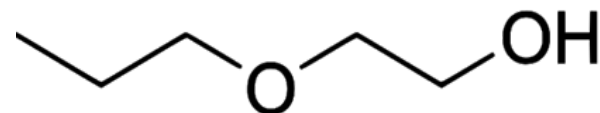
Other Authoritative Lists: 12 lists

EXAMPLE: UNINFORMED SUBSTITUTION



2-Butoxyethanol

- Frequently included in lists of solvents of concern
 - Cal/OSHA Hazardous Substances List
- Human health concerns include hemolysis leading to toxicity in kidney, spleen and liver.
- **Not allowed in Safer Choice-labeled products**



2-Propoxyethanol

- Not widely recognized as a solvent of concern
 - Not on Cal/OSHA Hazardous Substances List
- Similar human health concerns including hemolysis leading to toxicity in kidney, spleen and liver.
- **Not allowed in Safer Choice-labeled products**

SAFER CHEMICAL INGREDIENT LISTING PROCESS

www2.epa.gov/saferchoice/safer-ingredients

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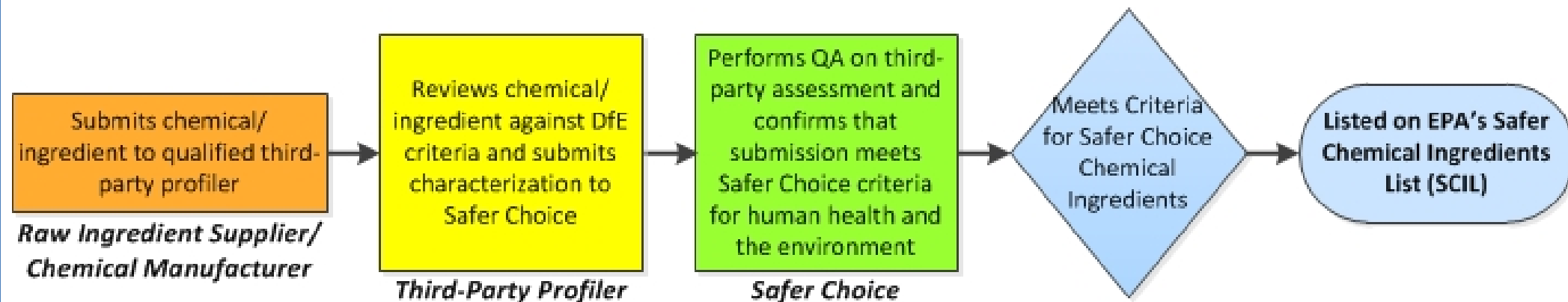
Safer Chemical Ingredients
List

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SUMMARY SAFER CHEMICAL INGREDIENTS LIST (SCIL)

www2.epa.gov/saferchoice/safer-ingredients

- List of chemicals that meet Safer Choice Chemical Criteria
- More than **650 chemicals** that may be used in Safer Choice-labeled products
- Living list
 - Additions and/or status changes of listed chemicals
 - Refresh every 3 years
- Responsive to stakeholders
- Established September 2012



USES FOR SCIL

Product Formulators

- To research and verify that proposed formulations will be eligible for the DfE label
- As a sustainability measure for non-DfE products

Chemical Manufacturers

- Are using criteria as a benchmark for new chemicals, e.g., Dow, BASF, AkzoNobel, Eastman, Segetis

EPA ChemView Portal

- Interactive web access to EPA chemical information with a focus on identifying safer chemicals (www.epa.gov/chemview)

Potential New Use: Organic Pesticide Formulators

- Research and identify previously reviewed chemicals for use in new formulations



POTENTIAL BENEFITS TO NOP

- Provides methodology for inert ingredient evaluation
 - Inert ingredients will be evaluated for
 - Potential Human Health and Mammalian Toxicity and Sensitization
 - Aquatic Toxicity (and other ecological endpoints if available)
 - Toxicity of Parent Compound and Degradate compounds
 - Environmental Persistence and Bioaccumulation Potential
- Third-Party Profiler provides a comprehensive report for the inert ingredient
- Listing ingredients on SCIL allows Organic Pesticide Formulators to make informed decisions on using safer ingredients



DfE/OPP ANTIMICROBIAL PILOT PROJECT

Pilot project with EPA's Office of Pesticide Programs (OPP) to recognize pesticide products such as disinfectants and sanitizers

- 2009 list of authorized actives included:
 - hydrogen peroxide, lactic acid, & citric acid
- List of actives expanded in 2012 to include:
 - ethanol & isopropanol
- Currently, 9 products have met the criteria and may use the DfE label
- Project webpage with the list of qualifying products:
<http://go.usa.gov/g4fj>



Safer Choice Webpages

Safer Choice Labeled Products:

www2.epa.gov/saferchoice/products

Safer Choice Standard for Safer Products:

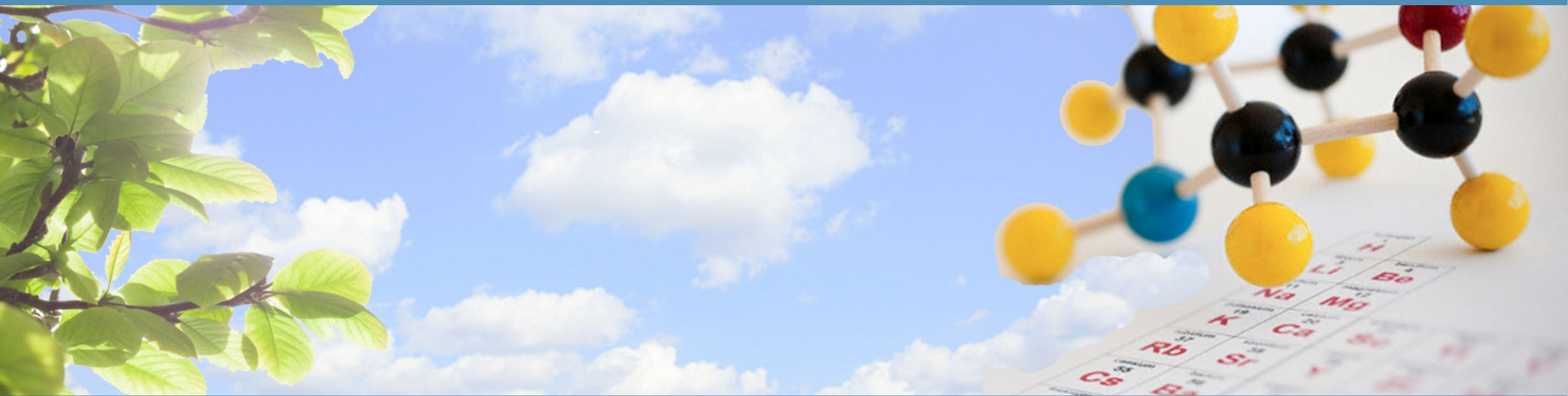
www2.epa.gov/saferchoice/standard

Safer Choice: Safer Chemical Ingredients List (SCIL):

www2.epa.gov/saferchoice/safer-ingredients

Safer Choice Program and Label Redesign:

www2.epa.gov/saferchoice/learn-about-safer-choice-label



THANK YOU!

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