

Canberra Corporation Corporate Chemicals Policy and Goals

OVERVIEW

This policy supports Canberra Corporation's commitment to operate our business in a responsible manner and to make it easier for our customers, suppliers, associates and communities to meet their regulatory, quality, sustainability, green cleaning, and green chemistry⁸ objectives. Canberra Corporation is committed to offering safe and sustainable products with a positive impact and help maintain a clean, safe and healthy built environment and workplace. We are committed to informed substitution¹⁴, transparency, proactive chemical management, sustainable chemistry and innovation in our operations and across all of our owned brand professional and household products.

Canberra Corporation recognizes that chemicals are a key element of our business. The introduction of new chemicals over the past few decades has provided significant value to our formulators and product designers. At the same time, we recognize that all chemicals are not created equal when it comes to their intrinsic hazards¹⁵, risks, hazard traits¹¹, health and eco-toxicity endpoints¹² or potential adverse effects on human health¹, indoor air quality¹³ and the environment². Canberra Corporation seeks to take a precautionary approach¹⁷ which will help protect vulnerable subpopulations²² and develop, manufacture, use and offer our customers products and services that are inherently safer to human and environmental health, prevents pollution¹⁶ and that address environmental impacts throughout their lifecycle.

Canberra Corporation places a priority on identifying and avoiding the use of harmful substances¹⁰ in our products, value chain, and operations. This policy supports our goals to safer product alternatives²¹ and prefer safer chemical alternatives²⁰ that have been designed using green chemistry⁸ principles. We believe a proactive approach to safer product alternatives²¹ can best be achieved through a comprehensive, integrated, prevention-oriented precautionary approach that identifies and avoids chemicals of high concern⁴ with the objective of selecting safer chemical alternatives. We are also concerned about chemicals where there is little or no toxicological information. We characterize these as chemicals of unknown concern⁵. Chemicals of unknown concern are not arbitrarily accepted as safer or preferred. We will identify chemicals by their chemical class or names as well as their Chemical Abstract Numbers³ when appropriate.

Eliminating or reducing hazards at the product design stage is one of Canberra Corporation's key objectives. We believe the transition by product designers, manufacturers and suppliers to safer alternatives at the product design stage will avoid the direct and indirect supply chain costs and risks associated with exposures, releases, hazardous materials handling, pollution abatement, exposure controls, product recalls, material inputs, hazardous waste disposal and long-term liabilities. We believe our comprehensive and pragmatic product and chemical priority approach¹⁸ to managing chemicals will build collaboration and accelerate similar efforts throughout the supply



chain. Canberra will publish a list of unwanted chemicals or restricted substances¹⁹ in Appendix B of this policy document.

VISION STATEMENT

A place where green chemistry, green engineering and sustainability are standard practice throughout our entire value chain.

OBJECTIVE AND PURPOSE

At Canberra Corporation, our objective is to manufacture high performance cleaning products in a manner sensitive to human health and the environment.

SCOPE

This policy applies to all products sold, licensed, manufactured or distributed by all Canberra Corporation business units. It includes but is not limited to all raw materials, ingredients, components, or contaminants of our products. It also includes our manufacturing processes, supply chain, facilities and packaging.

SUPPLY CHAIN KNOWLEDGE AND TRANSPARENCY

Our goal is to make informed decisions about the chemicals and ingredients we use to make products. We strive for increased transparency and full ingredient disclosure from our suppliers. We will work towards full material disclosure for all products that we manufacture and use in our operations. We will strive to get full ingredient information for all intentionally added chemicals at the appropriate *de minimis*⁷ level. Canberra Corporation respects a supplier's desire to protect Confidential Business Information⁶ (CBI) and will work with the supplier to protect CBI. However, when chemicals of high concern are part of the CBI claim, Canberra Corporation will ask the supplier to disclose the chemical of high concern to Canberra Corporation or a credible independent third-party entity agreed upon by both the supplier and Canberra Corporation.

PRODUCT DESIGN: SAFER CHEMISTRY, ALTERNATIVES AND VERIFICATIONS

Canberra seeks to offer customers high performance products that are inherently safe for human and environmental health while using the safest available technology and materials across the life cycle of our products. We will strive to use ingredients that have been designed using green chemistry principles⁸. We will use credible safer chemical ingredient lists such as EPA Safer Chemicals Ingredients List (SCIL), GreenBlue CleanGredients and ChemSec Marketplace to help make informed choices and avoid regrettable substitutions. We will conduct risk assessments and hazard assessments using hazard screening tools like Clean Production Action GreenScreen⁹. We will use credible product certifications such as EPA Safer Choice, Green Seal, and UL Environmental EcoLogo to verify claims and compliance. We will respect and support religious quality certifications including Kosher and Halal which includes ingredient transparency.



INNOVATION

Our goal is to actively pursue and implement new technology in cleaning product development and use of innovative and safer alternatives. We will prefer whenever feasible the use of safer chemicals and ingredients which utilize green chemistry principles in their development. We define green chemistry as the **design** of chemical products and processes to reduce and/or eliminate substances **hazardous** to human health and the environment and embrace the twelve principles of green chemistry as they are described by Dr. Paul Anastas and Dr. John Warner in their 1999 book, "**Green Chemistry Theory and Practice**". Canberra believes that by applying the twelve principles of green chemistry we will help prevent waste, eliminate hazard at the product design phase, avoid unwanted derivatives, use renewable raw materials, prevent pollution, reduce energy consumption and minimize exposure or potential for accidents.

INFORMED CONSUMERS

Our goal is to maintain consumer confidence in the products we sell by providing meaningful and easily accessible product composition information as well as educational information so that the consumer can use the product correctly, effectively and responsibly.

PUBLIC COMMITMENT

We will set annual objectives for safer chemical use and be transparent about our objectives. We will make this policy available and report progress. We will follow a philosophy of continuous improvement and update our objectives and goals as we meet specific milestones.

Canberra Corporation Chemical Policy
Appendix A: Key Definitions
(For purposes of this policy and its implementation)

¹ Adverse health effect

For purposes of this policy and its implementation, adverse health effect means a biochemical change in body function or cell structure that might lead to disease or health problems.

² Adverse environmental impact

For purposes of this policy and its implementation, adverse environmental impact means any of the following: adverse air quality impacts, adverse ecological impacts, adverse soil quality impacts, or adverse water quality impacts.

³ CAS Number

A unique identifier assigned by the Chemical Abstract Service of the American Chemical Society to distinctively identify chemical elements, compounds, polymers, and other materials and mixtures.

⁴ Chemical of high concern identification



For purposes of this policy and its implementation, Canberra Corporation defines a chemical of high concern as any chemical where there is credible evidence that show intrinsically hazardous properties as listed below and not just those that have been regulated or restricted in other regions:

- persistent, bio-accumulative and toxic (PBT);
- very persistent and toxic (vPT);
- very persistent and very bio-accumulative (vPvB);
- very bio-accumulative and toxic (vBT);
- carcinogenic, mutagenic and toxic for reproduction (CMR);
- endocrine disrupters (ED)/
- neurotoxins;
- sensitizers;
- exhibit high acute or chronic toxicity through primary routes of exposure.

⁵ Chemicals of unknown concern

For purposes of this policy and its implementation, a chemical of unknown concern is a chemical with insufficient data to conclusively determine if it displays a hazard trait. Chemicals of unknown concern are not arbitrarily accepted as safer or preferred.

⁶ Confidential Business Information

For purposes of this policy and its implementation, confidential business information (CBI) means the specific chemical identity is being claimed confidential by the supplier. The supplier may be claiming the specific chemical identity is confidential in order to protect its investment or time, money and human resources that went into the research and development process. Canberra Corporation respects a supplier's desire to protect CBI and will work with the supplier to protect CBI. However, when chemicals of high concern are part of the CBI claim, Canberra Corporation will ask the supplier to disclose the chemical of high concern to Canberra Corporation or a credible independent third-party entity agreed upon by both the supplier and Canberra Corporation. If the supplier is unwilling or unable to share the identity of the chemical, then the supplier will be asked to identify the chemical of concern as "Confidential" and identify the intrinsically hazardous property or properties of the confidential chemical and the authoritative list or lists on which the chemical is listed.

⁷ De minimis level

For purposes of this policy and its implementation, "de minimis level", means for a chemical that is an intentionally added chemical, a concentration below the practical quantification limit; or for a chemical that is a contaminant, a concentration below 100 parts per million.

⁸ Green chemistry

For purposes of this policy and its implementation, "green chemistry" is an innovative, economics-driven and science-based approach to reducing or eliminating the use and



generation of substances hazardous to human and environmental health across their lifecycles. It is governed by the twelve guiding principles of green chemistry as presented in the book, "Green Chemistry Theory and Practice" authored by, Dr. Paul T. Anastas and Dr. John C. Warner.

- **1** *Prevention* It is better to prevent waste than to treat or clean up waste after it has been created.
- **2** Atom Economy -- Synthetic methods should be designed to maximize the incorporation of all materials used in the process into the final product.
- **3** Less Hazardous Chemical Syntheses -- Wherever practicable, synthetic methods should be designed to use and generate substances that possess little or no toxicity to human health and the environment.
- **4** Designing Safer Chemicals -- Chemical products should be designed to affect their desired function while minimizing their toxicity.
- **5** Safer Solvents and Auxiliaries -- The use of auxiliary substances (e.g., solvents, separation agents, etc.) should be made unnecessary wherever possible and innocuous when used.
- **6** Design for Energy Efficiency -- Energy requirements of chemical processes should be recognized for their environmental and economic impacts and should be minimized. If possible, synthetic methods should be conducted at ambient temperature and pressure.
- 7 Use of Renewable Feedstock -- A raw material or feedstock should be renewable rather than depleting whenever technically and economically practicable.
- **8** Reduce Derivatives -- Unnecessary derivatization (use of blocking groups, protection, de-protection, temporary modification of physical/chemical processes) should be minimized or avoided if possible, because such steps require additional reagents and can generate waste.
- **9** Catalysis -- Catalytic reagents (as selective as possible) are superior to stoichiometric reagents.
- **10** Design for Degradation -- Chemical products should be designed so that at the end of their function they break down into innocuous degradation products and do not persist in the environment.
- **11** Real-Time Analysis for Pollution Prevention -- Analytical methodologies need to be further developed to allow for real-time, in-process monitoring and control prior to the formation of hazardous substances.
- **12** Inherently Safer Chemistry for Accident Prevention -- Substances and the form of a substance used in a chemical process should be chosen to minimize the potential for chemical accidents, including releases, explosions, and fires.

⁹ Green Screen

The GreenScreen[™] for Safer Chemicals is a comparative chemical hazard screening method developed by Clean Production Action to help companies, organizations and communities more quickly and effectively move toward the use of greener and safer chemicals. GreenScreen[™] is a fully transparent and publicly accessible comparative chemical hazard assessment tool to identify and compare substances that are inherently



less hazardous for humans and the environment. The GreenScreen™ is being used by organizations and businesses to evaluate the hazards associated with specific chemicals and identify safer alternatives. Full GreenScreen experts use: Lists, test results, scientific literature, models, analogs, etc. GreenScreen Lite experts use: Hazard lists and risk/hazard phrases.

10 Harmful substances and chemicals

For purposes of this policy and its implementation, "harmful substances and chemicals" include substances and chemicals that when based on authoritative lists, test results, scientific literature, models and analogs show intrinsically hazardous properties which are defined as persistent, bio-accumulative and toxic (PBT); very persistent and toxic (vPT); very persistent and very bio-accumulative (vPvB); very bio-accumulative and toxic (vBT); carcinogenic, mutagenic and toxic for reproduction (CMR); endocrine disrupters (ED) not just those that have been regulated or restricted in other regions. Based on authoritative lists, test results, scientific literature, models and analogs.

11 Hazard traits

For purposes of this policy and its implementation, "hazard traits" are properties of chemicals that fall into broad categories of toxicity, adverse environmental effects, or physical hazards. See "Hazardous substances and chemicals".

12 Health, ecotoxicity and physical hazard endpoints

For purposes of this policy and its implementation, ecotoxicity and physical hazard endpoints are defined as specific types of adverse effects listed below. Canberra Corporation will ask suppliers to identify chemical products, ingredients or products that contain chemicals that have been shown to have one or more of the following human health and ecotoxicity endpoints:

Human Health Endpoints

- Carcinogenicity
- Mutagenicity/Genotoxicity
- Reproductive Toxicity
- Developmental Toxicity incl. developmental neurotoxicity
- Endocrine Activity
- Acute Mammalian Toxicity
- Systemic Toxicity/Organ Effects including immunotoxicity-single exposure
- Neurotoxicity-single exposure
- Eye Irritation/Corrosivity ability to cause irritation or serious damage to the eye.
- Skin Irritation/Corrosivity
- Systemic Toxicity/Organ Effects including immunotoxicity-repeated exposure
- Neurotoxicity repeated exposure
- Respiratory Sensitization
- Skin Sensitization



Ecotoxicity Endpoints

- Acute Aquatic Toxicity
- Chronic Aquatic Toxicity
- Terrestrial Ecotoxicity

Environmental Fate

Persistent Bioaccumulative Toxicant (PBT)

Physical Hazard

- Flammability
- Reactivity

¹³ **Indoor air quality** is a term referring to the air quality within and around buildings and structures, especially as it relates to the health and comfort of building occupants.

¹⁴ Informed substitution

An information based decision to replace an existing chemical, material, product or process with a reliable safer alternative. An informed decision must be based on having an adequate quantity and quality of information that is relevant, meaningful and credible. A key outcome is to avoid regrettable substitution.

15 Intrinsic hazard

The Intrinsic hazard of a chemical refers to the innate or inherent essential nature or ability for a chemical to cause acute or chronic adverse effect to human health or the environment. For example, neurotoxicity is a known hazard trait intrinsic to lead.

¹⁶ **Pollution prevention** (P2) is reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream.

¹⁷ Precautionary approach

For purposes of this policy and its implementation, "precautionary approach" means that when, on the basis of available evidence that a chemical in a product may harm human health or the environment, a cautious approach will be taken in advance, even if the full extent of harm has not yet been fully and scientifically demonstrated. In essence, it means taking preventive action in the face of uncertainty.

¹⁸ Priority products

For purposes of this policy and its implementation, "priority products" are defined as those products that contain chemicals of high concern above the de minimis level as defined in this policy.



¹⁹ Restricted substances list

For purposes of this policy and its implementation, the restricted substances list is a priority list of chemicals of high concern that Canberra prefers to not use in its formulated products. The list which is Appendix B of the Canberra Chemical Policy will be updated periodically.

²⁰ Safer chemical alternatives

For purposes of this policy and its implementation, Canberra Corporation defines a "safer chemical alternative" as a chemical that does not appear on any of the authoritative chemicals of high concern lists. Suppliers are encouraged to conduct hazard assessments that evaluate and compare toxicity endpoints as defined in this policy. Canberra Corporation encourages suppliers when possible to use GreenScreen™ for Safer Chemicals.

²¹ Safer product alternatives

For purposes of this policy and its implementation, Canberra Corporation defines a "safer product alternative" as a product that is more sustainable and has a reduced negative effect on environmental and human health and performs equal to or better than the product that it is designed or intended to replace.

²² Sensitive subpopulations

For purposes of this policy and its implementation, Canberra Corporation defines "sensitive subpopulations" means subgroups that comprise a meaningful portion of the general population that are identifiable as being at greater risk of adverse health effects when exposed to one or more priority COC that exhibit a hazard trait or toxicological endpoint, including, but not limited to, infants, children, pregnant women, women of childbearing age, elderly individuals, and individuals with a history of serious illness that renders them as being at greater risk of adverse health effects when exposed to COC.

Canberra Corporation Chemical Policy Appendix B: Restricted Substances List (For purposes of this policy and its implementation)

The primary focus for unwanted or restricted chemicals include those chemicals that are carcinogenic, mutagenic, or cause reproductive issues when in contact with workers, customers or the communities.

Scope

All Canberra owned brand products in accordance with the Canberra Chemical Policy

RSL Test Matrix

The following table outlines the restricted chemicals, their limits as well as the required test methods. In order to be in compliance with Canberra RSL requirements, restricted



substances must not exceed the RSL limits. Canberra will continue to update the RSL on an ongoing basis.

Priority Chemicals or Priority Chemical Classes	Chemical Function	Priority Product Categories	Limit Value (ppm)	Test Methods
Ortho phthalates	Plasticizer	Cleaning Products and Floor Coating Products	500 ppm each and 1000 ppm Total	For CPSIA Regulated Products: CPSC-CH- C-1001- 09.3 For Non-CPSIA Regulated Products: CPSC-CH- C1001-09.3 or ISO 14389 (GS-MS)
Alkylphenol ethoxylates and their breakdown products	Surfactant	Cleaning Products, Floor Coatings and Personal Care Products	Zero	ASTM D4252-89 (2017)
Perfluorinated and polyfluorinated chemicals	Water and Stain Repellant	Floor Coatings and Cleaning Products	1ug/m2	CEN/TS 15968
Parabens, formaldehyde, triclosan, triclocarban	Preservative and Antimicrobial	Cleaning Products, Floor Coatings and Personal Care Products	Zero	Credible test method designed to accurately measure the level of specific chemical.
Methylene chloride, N- Methyl-2- pyrrolidone (NMP), toluene and xylene	Solvent	Graffiti Remover, Ink Remover and Paint Remover Products	Zero	Credible test method designed to accurately measure the level of specific chemical.
1,4-dioxane	Ethoxylation Contaminant	Liquid Hand Soaps, Dish Detergent, Laundry Detergent and Hair Shampoos	Zero	EPA 8270C

