Title 40 —Protection of Environment
Chapter I —Environmental Protection Agency
Subchapter R —Toxic Substances Control Act
Part 720 —Premanufacture Notification
Subpart C —Notice Form

Authority: 15 U.S.C. 2604, 2607, and 2613.
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§ 720.45 Information that must be included in the notice form.

Each person who submits a notice must include the information specified in the notice form to the extent it is known to or reasonably ascertainable by the submitter. However, no person is required to include information which relates solely to exposure of human or ecological populations outside of the United States. The notice form requires the following information relating to the manufacture, processing, distribution in commerce, use, and disposal of the new chemical substance:

(a)

(1) The specific chemical identity of the substance that the person intends to manufacture or import, which includes the following:

(i) The currently correct Chemical Abstracts (CA) name for the substance, based on the Ninth Collective Index (9CI) of CA nomenclature rules and conventions, and consistent with listings for similar substances in the Inventory. For each substance having a chemical composition that can be represented by a specific, complete chemical structure diagram (a Class 1 substance), a CA Index Name must be provided. For each chemical substance that cannot be fully represented by a complete, specific chemical structure diagram (a Class 2 substance), or if the substance is a polymer, a CA Index Name or CA Preferred Name must be provided (whichever is appropriate based on CA 9CI nomenclature rules and conventions). In addition, for a Class 2 substance, the notice must identify the immediate chemical precursors and reactants by specific chemical name and Chemical Abstracts Service Registry Number (CASRN), if the number is available. Tradenames or generic names of chemical precursors or reactants are not acceptable as substitutes for specific chemical names.

(ii) The currently correct CASRN for the substance if a CASRN already exists for the substance.

(iii) For a Class 1 substance and for any Class 2 substance for which a definite molecular formula is known or reasonably ascertainable, the correct molecular formula.

(iv) For a Class 1 substance, a complete, correct chemical structure diagram; for a Class 2 substance or polymer, a correct representative or partial chemical structure diagram, as complete as can be known, if one can be reasonably ascertained.

(2) For a polymer, the submitter must also report the following:

(i) The specific chemical name and CASRN, if the number is available, of each monomer and other reactant used, at any weight percent, to manufacture the polymer. Tradenames or generic names of chemical reactants or monomers are not acceptable as substitutes for specific chemical names.

(ii) The typical percent by weight of each monomer and other reactant in the polymer (weight of the monomer or other reactant expressed as a percentage of the weight of the polymeric chemical substance manufactured), and the maximum residual amount of each monomer present in the polymer.

(iii) For monomers and other reactants used at 2 weight percent or less (based on the dry weight of the polymer manufactured), indicate on the PMN form any such monomers and other reactants that should be included as part of the polymer description on the Inventory, where the weight percent is based on either

(A) the weight of monomer or other reactant actually charged to the reaction vessel, or

(B) the minimum weight of monomer or other reactant required in theory to account for the actual weight of monomer or other reactant molecules or fragments chemically incorporated (chemically combined) in the polymeric substance manufactured.

(iv) For a determination that 2 weight percent or less of a monomer or other reactant is incorporated (chemically combined) in a polymeric substance manufactured, as specified in paragraphs (a)(2)(iii)(B) of this section, analytical data or appropriate theoretical calculations (if it can be documented that analytical measurement is not feasible or not necessary) to support this determination must be maintained at the site of manufacture or import of the polymer.

(v) Measured or estimated values of the minimum number-average molecular weight of the polymer and the amount of low molecular weight species below 500 and below 1,000 molecular weight, with a description of how the measured or estimated values were obtained.

(3) The person must use one of the following two methods to develop or obtain the specified chemical identity information reported under paragraphs (a) (1) and (2) of this section and must identify the method used in the notice:

(i) ***Method 1.*** Obtain the correct chemical identity information required by paragraphs (a) (1) and (2) of this section directly from the Chemical Abstracts Service (CAS), specifically from the CAS Registry Services Inventory Expert Service, prior to submitting a notice to EPA. A copy of the chemical identification report obtained from CAS must be submitted with the notice.

(ii) ***Method 2.*** Obtain the correct chemical identity information required by paragraphs (a) (1) and (2) from any source. The notice will be incomplete according to § 720.65(c)(1)(vi) if the person uses Method 2 and any chemical identity information is determined to be incorrect by EPA.

(4) If an importer submitting the notice cannot provide all the information specified in paragraphs (a)(1) and (2) of this section because it is claimed as confidential by the foreign supplier of the substance, the importer must have the foreign supplier follow the procedures in paragraph (a)(3) of this section and provide the correct chemical identity information specified in paragraphs (a)(1) and (2) of this section directly to EPA in a joint submission or as a letter of support to the notice, which clearly references the importer's notice and PMN User Fee Identification Number. The applicable review period will commence upon receipt of both the notice and the complete, correct information, in accordance with § 720.65.

(5) If a manufacturer cannot provide all the information specified in paragraphs (a)(1) and (2) of this section because the new chemical substance is manufactured using a reactant having a specific chemical identity claimed as confidential by its supplier, the manufacturer must submit a notice directly to EPA containing all the information known by the manufacturer about the chemical identity of the reported substance and its proprietary reactant. In addition, the manufacturer must ensure that the supplier of the confidential reactant submit a letter of support directly to EPA providing the specific chemical identity of the confidential reactant, including the CASRN, if available, and the appropriate PMN or exemption number, if applicable. The letter of support must reference the manufacturer's name and PMN Fee Identification Number. The applicable review period will commence upon receipt of the notice, the letter of support, and the complete, correct information, in accordance with § 720.65.

(b) The impurities anticipated to be present in the substance by name, CAS Registry number, and weight percent of the total substance.

(c) Known synonyms or trade names of the new chemical substance.

(d) A description of the byproducts resulting from the manufacture, processing, use, and disposal of the new chemical substance.

(e) The estimated maximum amount to be manufactured during the first year of production and the estimated maximum amount to be manufactured during any 12-month period during the first three years of production.

(f)

(1) A description of the intended category or categories of consumer or commercial use by function and application, which includes a description of the following:

(i) The estimated percent of production volume devoted to each category of use.

(ii) The percent of the new chemical substance in the formulation for each commercial or consumer use.

(iii) The types of products or articles that would incorporate the new chemical substance (*e.g.,* household cleaners, plastic articles).

(iv) Information related to the use of products or articles containing the new chemical substance by potentially exposed or susceptible subpopulations.

(v) How and where a product or article containing the new chemical substance would be used (*e.g.,* spray applied indoors, brushed on outdoor surfaces).

(vi) Consumption rates and frequency and duration of use of products or articles containing the new chemical substance.

(2) Using the applicable codes listed in Table 1 to paragraph (f)(2), submitters must designate the consumer and commercial product category or categories that best describe the consumer and commercial products in which the new chemical substance is intended or known to be used. When

more than 10 codes apply to the consumer or commercial products in which the new chemical substance is intended or known to be used, submitters should only designate the 10 product categories that represent the highest proportion of the anticipated production volume.

Table 1 to Paragraph (f)(2)—Codes for Reporting Consumer and Commercial Product Categories

Code	Category
	Chemical Substances in Furnishing, Cleaning, Treatment Care Products
CC101	Construction and building materials covering large surface areas including stone, plaster, cement, glass and ceramic articles; fabrics, textiles, and apparel.
CC102	Furniture & furnishings including plastic articles (soft); leather articles.
CC103	Furniture & furnishings including stone, plaster, cement, glass, and ceramic articles; metal articles; or rubber articles.
CC104	Leather conditioner.
CC105	Leather tanning, dye, finishing, impregnation, and care products.
CC106	Textile (fabric) dyes.
CC107	Textile finishing and impregnating/surface treatment products.
CC108	All-purpose foam spray cleaner.
CC109	All-purpose liquid cleaner/polish.
CC110	All-purpose liquid spray cleaner.
CC111	All-purpose waxes and polishes.
CC112	Appliance cleaners.
CC113	Drain and toilet cleaners (liquid).
CC114	Powder cleaners (floors).
CC115	Powder cleaners (porcelain).
CC116	Dishwashing detergent (liquid/gel).
CC117	Dishwashing detergent (unit dose/granule).
CC118	Dishwashing detergent liquid (hand-wash).
CC119	Dry cleaning and associated products.
CC120	Fabric enhancers.
CC121	Laundry detergent (unit-dose/granule).
CC122	Laundry detergent (liquid).
CC123	Stain removers.
CC124	Ion exchangers.
CC125	Liquid water treatment products.
CC126	Solid/Powder water treatment products.
CC127	Liquid body soap.
CC128	Liquid hand soap.
CC129	Solid bar soap.

Code	Category
CC130	Air fresheners for motor vehicles.
CC131	Continuous action air fresheners.
CC132	Instant action air fresheners.
CC133	Anti-static spray.
CC134	Apparel finishing, and impregnating/surface treatment products.
CC135	Insect repellent treatment.
CC136	Pre-market waxes, stains, and polishes applied to footwear.
CC137	Post-market waxes, and polishes applied to footwear (shoe polish).
CC138	Waterproofing and water-resistant sprays.
	CHEMICAL SUBSTANCES IN CONSTRUCTION, PAINT, ELECTRICAL, AND METAL PRODUCTS
CC201	Fillers and putties.
CC202	Hot-melt adhesives.
CC203	One-component caulks.
CC204	Solder.
CC205	Single-component glues and adhesives.
CC206	Two-component caulks.
CC207	Two-component glues and adhesives.
CC208	Adhesive/Caulk removers.
CC209	Aerosol spray paints.
CC210	Lacquers, stains, varnishes, and floor finishes.
CC211	Paint strippers/removers.
CC212	Powder coatings.
CC213	Radiation curable coatings.
CC214	Solvent-based paint.
CC215	Thinners.
CC216	Water-based paint.
CC217	Construction and building materials covering large surface areas, including wood articles.
CC218	Construction and building materials covering large surface areas, including paper articles; metal articles; stone, plaster, cement, glass, and ceramic articles.
CC219	Machinery, mechanical appliances, electrical/electronic articles.
CC220	Other machinery, mechanical appliances, electronic/electronic articles.
CC221	Construction and building materials covering large surface areas, including metal articles.
CC222	Electrical batteries and accumulators.
	CHEMICAL SUBSTANCES IN PACKAGING, PAPER, PLASTIC, TOYS, HOBBY PRODUCTS
CC301	Packaging (excluding food packaging), including paper articles.
CC302	Other articles with routine direct contact during normal use, including paper articles.
CC303	Packaging (excluding food packaging), including rubber articles; plastic articles (hard); plastic articles (soft).
CC304	Other articles with routine direct contact during normal use including rubber articles;

Code	Category
	plastic articles (hard).
CC305	Toys intended for children's use (and child dedicated articles), including fabrics, textiles, and apparel; or plastic articles (hard).
CC306	Adhesives applied at elevated temperatures.
CC307	Cement/concrete.
CC308	Crafting glue.
CC309	Crafting paint (applied to body).
CC310	Crafting paint (applied to craft).
CC311	Fixatives and finishing spray coatings.
CC312	Modelling clay.
CC313	Correction fluid/tape.
CC314	Inks in writing equipment (liquid).
CC315	Inks used for stamps.
CC316	Toner/Printer cartridge.
CC317	Liquid photographic processing solutions.
	CHEMICAL SUBSTANCES IN AUTOMOTIVE, FUEL, AGRICULTURE, OUTDOOR USE PRODUCTS
CC401	Exterior car washes and soaps.
CC402	Exterior car waxes, polishes, and coatings.
CC403	Interior car care.
CC404	Touch up auto paint.
CC405	Degreasers.
CC406	Liquid lubricants and greases.
CC407	Paste lubricants and greases.
CC408	Spray lubricants and greases.
CC409	Anti-freeze liquids.
CC410	De-icing liquids.
CC411	De-icing solids.
CC412	Lock deicers/releasers.
CC413	Cooking and heating fuels.
CC414	Fuel additives.
CC415	Vehicular or appliance fuels.
CC416	Explosive materials.
CC417	Agricultural non-pesticidal products.
CC418	Lawn and garden care products.
	CHEMICAL SUBSTANCES IN PRODUCTS NOT DESCRIBED BY OTHER CODES
CC980	Other (specify).
CC990	Non-TSCA use.

(g) For sites controlled by the submitter:

(1) The identity and address of each site where the new chemical substance will be manufactured, processed, or used.

(2) A process description of each manufacture, processing, and use operation which includes a diagram of the major unit operations and chemical conversions; indication of whether batch or continuous manufacturing or processing occurs at the site, and the amount manufactured or processed per batch or per day if continuous and per year; the identity, approximate weight per batch or per day for continuous production, and entry point of all starting materials and feedstocks (including reactants, solvents, catalysts, etc.); the identity, approximate weight per batch or per day for continuous production, and entry point of all products, recycle streams, and wastes, including frequency of any equipment cleaning; the type of interim storage and transport containers used; and the points of release of the new chemical substance numbered. If the new chemical substance is released to two media at the same step in the process, assign a second number for the second medium.

(3) Worker exposure information for each worker activity anticipated or known to occur during manufacture, processing, or use of the new chemical substance, including worker exposure information from exempt manufacture or related use of the new chemical substance under § 720.30. This information includes:

(i) A description of each worker activity.

(ii) Type of potential worker exposure (*e.g.,* dermal, inhalation).

(iii) Protective equipment in place, if any, including a description of the kind of gloves, protective clothing, goggles, or respirator that limit worker exposure.

(iv) Engineering controls in place, if any.

(v) Physical form of the new chemical substance to which workers may be exposed and moisture content if physical form is solid.

(vi) The percent of new chemical substance in formulation at time of worker exposure.

(vii) The number of workers reasonably likely to be exposed.

(viii) The duration of activities.

(4) Information on known or anticipated release of the new chemical substance to the environment, including releases from the exempt manufacture or related use of the new chemical substance under § 720.30. This information includes the type of release (*e.g.,* transport, interim storage, disposal, equipment cleaning), the quantity of the new chemical substance released directly to the environment, the quantity of the new chemical substance released into control technology, the quantity of the new chemical substance released to the environment after control technology, the media of release, the type of control technology used, and the following additional information based on the type of release:

(i) For equipment cleaning releases, frequency of equipment cleaning and what is used to clean the equipment.

(ii) For transport and storage releases, how the new chemical substance or product containing the new chemical substance is transported from the site and stored, whether dedicated containers are used, whether the cleaning and disposal of the containers is under the submitter's control, the container cleaning method, the frequency of container cleaning, and the amount of release per container cleaning.

(iii) For releases into air, Clean Air Act operating permit numbers, a description of any Leak Detection and Repair program in accordance with 40 CFR parts 60, 61, 63, 65, 264 or 265 (related to the monitoring and management of fugitive releases) the site has implemented, and the type of air pollution control technologies used at the site to treat the stack releases that will contain the new chemical substance.

(iv) For releases into water, the National Pollutant Discharge Elimination System (NPDES) permit number(s), outfall numbers, the name(s) of the waterbody into which the release occurs, and other destination(s) into which the release occurs.

(v) For releases into wastewater treatment plants, the name(s) of the publicly owned treatment works (POTW) or privately owned treatment works into which the release occurs and the corresponding NPDES permit number(s), the type of wastewater treatment technology or technologies employed, and a description of the known or expected treatment efficiency.

(h) For sites not controlled by the submitter:

(1) The identity and address of each site where the new chemical substance will be manufactured, processed, or used.

(2) A description of each type of processing and use operation involving the new chemical substance, including identification of the estimated number of processing or use sites; a process description of each operation which includes a diagram of the major unit operations and chemical conversions; the identity, approximate weight per batch or per day for continuous production, and entry point of all starting materials and feedstocks (including reactants, solvents, catalysts, etc.); the identity, approximate weight per batch or per day for continuous production, and entry point of all products, recycle streams, and wastes, including frequency of any equipment cleaning; the type of interim storage and transport containers used; and the points of release of the new chemical substance numbered. If the new chemical substance is released to two media at the same step in the process, assign a second number for the second medium.

(3) Worker exposure information for each worker activity anticipated or known to occur during manufacture, processing, or use of the new chemical substance, including worker exposure information from exempt manufacture or related use of the new chemical substance under § 720.30. This information includes:

(i) A description of each worker activity.

(ii) Type of potential worker exposure (*e.g.,* dermal, inhalation).

(iii) Protective equipment in place, if any, including a description of the kind of gloves, protective clothing, goggles, or respirator that limit worker exposure, if any.

(iv) Engineering controls in place if any.

(v) Physical form of the new chemical substance to which workers may be exposed and moisture content if physical form is solid.

(vi) The percent of the new chemical substance in formulation at time of worker exposure.

(vii) The number of workers reasonably likely to be exposed.

(viii) The duration of activities.

(4) Information on known or anticipated release of the new chemical substance to the environment, including releases from the exempt manufacture or related use of the new chemical substance under § 720.30. This information includes the type of release (*e.g.,* transport, interim storage, disposal, equipment cleaning), the quantity of the new chemical substance released directly to the environment, the quantity of the new chemical substance released into control technology, the quantity of the new chemical substance released to the environment after control technology, the media of release, the type of control technology used, and the following additional information based on the type of release:

(i) For equipment cleaning releases, frequency of equipment cleaning and what is used to clean the equipment.

(ii) For transport and storage releases, how the new chemical substance or product containing the new chemical substance will be transported from the site and stored, whether dedicated containers are used, whether the cleaning and disposal of the containers is under the submitter's control, the container cleaning method, the frequency of container cleaning, and the amount of release of the new chemical substance per container cleaning.

(iii) For releases into air, Clean Air Act operating permit numbers, a description of any Leak Detection and Repair program in accordance with 40 CFR parts 60, 61, 63, 65, 264 or 265 (related to the monitoring and management of fugitive releases) the site has implemented, and the type of air pollution control technologies used at the site to treat the stack releases that will contain the new chemical substance.

(iv) For releases into water, the National Pollutant Discharge Elimination System (NPDES) permit number(s), outfall numbers, the name(s) of the waterbody into which the release occurs, and other destination(s) into which the release occurs.

(v) For releases into wastewater treatment plants, the name(s) of the publicly owned treatment works (POTW) or privately owned treatment works into which the release occurs and the corresponding NPDES permit number(s), the type of wastewater treatment technology or technologies employed, and a description of the known or expected treatment efficiency.

(i) Any safety data sheet already developed for the new chemical substance, including draft safety data sheets.

(j) The physical and chemical properties and environmental fate characteristics of the new chemical substance, which include the following:

(1) For physical and chemical properties, such information includes boiling point, sublimation, density/relative density, dissociation constant, explodability, flammability, melting point, octanol/water partition coefficient, particle size distribution, particle size distribution analysis (*i.e.,* analysis method and data used to develop the particle size distribution), the physical state of the neat substance, pH, solubility, vapor pressure, volatilization from water, volatilization from soil, spectra, UV-VIS absorption data, and surface tension.

(2) For environmental fate characteristics, such information includes hydrolysis, photolysis, aerobic and anaerobic biodegradation, atmospheric oxidation half-lives, Henry's law constant, adsorption/desorption coefficient, bioaccumulation or bioconcentration factor, Incineration Removal Efficiency (Destruction and Removal Efficiencies or DREs), and Sewage Treatment (WWTP) Removals.

(k) Information about pollution prevention efforts, such as using alternative fuel sources, reducing the use of water and chemical inputs, modifying a production process to produce less waste, or implementing water and energy conservation practices, or substituting for riskier existing products. Inclusion of this information is optional.

[48 FR 21742, May 13, 1983, as amended at 60 FR 16310, Mar. 29, 1995; 83 FR 52719, Oct. 17, 2018; 87 FR 39763, July 5, 2022; 89 FR 102792, Dec. 18, 2024]