

	U.S. ENVIRONMENTAL PROTECTION AGENCY 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460	Send completed form to: Document Control Office (7407M) Office of Pollution Prevention and Toxics U.S. EPA Room 6438 EPA East 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460 Attn: 8(a) PAIR Reporting	CONTROL NUMBER PERIOD COVERED FROM: Mo. Yr. TO: Mo. Yr.
	MANUFACTURER'S REPORT PRELIMINARY ASSESSMENT INFORMATION This information is required under the authority of Section 8(a), Toxic Substances Control Act. 15 U.S.C. 2607.		

Section I - CERTIFICATION

TECHNICAL CERTIFICATION STATEMENT I hereby certify that, to the best of my knowledge and belief, all information entered on this form is complete and accurate. I agree to permit access to, and the copying of records by, a duly authorized representative of the EPA Administrator, in accordance with the Toxic Substances Control Act, to document any information reported here.	Signature Name and title <i>Please print or type</i>	Date
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CONCERNING EPA DISCLOSURE OF INFORMATION
 Any person who submits information to EPA under the Preliminary Assessment Information Rule (40 CFR 712) should be aware of EPA regulations (40 CFR Part 2) which govern the disclosure of such information. Those regulations provide that any such person may, if he or she desires, assert a confidentiality claim covering part or all of the information submitted. Information covered by such a claim will be publicly disclosed by EPA only to the extent, and by means of the procedures, set forth in 40 CFR Part 2. However, if no such claim accompanies the information when it is received, EPA may make that information public without notifying the submitter.

CONFIDENTIALITY STATEMENTS
 Information disclosed to EPA on this form may be claimed confidential by marking the appropriate boxes below. The person signing the Confidentiality Certification Statement attests to the truth of the following four statements concerning all information that is claimed confidential. Note that chemical substance identity may not be claimed confidential for this rule.

1. My company has taken measures to protect the confidentiality of the information, and intends to continue to take such measures.
2. The information is not, and has not been, reasonably obtainable without our consent by other persons (other than governmental bodies) by use of legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding).
3. The information is not publicly available elsewhere.
4. Disclosure of the information would cause substantial harm to our competitive position.

CONFIDENTIALITY CERTIFICATION STATEMENT I hereby certify that the Confidentiality Statements on this form are true as to that information below for which I have asserted a confidentiality claim.	Signature Name and title <i>Please print or type</i>	Date
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Section II - CHEMICAL IDENTIFICATION

Part A CAS No. Chemical name (first 15 characters)	Part B Category name (first 15 characters) Inventory Form C number
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Section III - RESPONDENT IDENTIFICATION
 MARK THIS BOX TO CLAIM THIS SECTION CONFIDENTIAL

Part A --- Plant Site --- Physical location Name Number and street City County State ZIP Code Dun and Bradstreet number	Part B --- Mailing Address of: Corporate headquarters Plant Site Name Number and street City State ZIP Code Dun and Bradstreet number (for corporate headquarters only)
Part C --- Technical contact Name and title Telephone (Area code/number) At headquarters At plant site	Part D --- Acknowledgement EPA will send acknowledgement to - <i>Name and title</i>

Section IV – PRELIMINARY ASSESSMENT INFORMATION

NOTE

Mark the box to the left of the item to claim the answer to the item as confidential. Report all quantities in kilograms (1 kilogram equals 2.2 pounds). Enter N/A for any item that does not apply to you; do not leave any blanks.

► **Part A – Plant Site Activities** – Information in part A must be your best estimate from readily obtainable data.
For items 3b, 3c, and 3d, specify the accuracy of your answers.

1. Total quantity imported	kg	2. Quantity manufactured for sale or use	kg
3 a. Quantity lost during manufacture <i>(3b + 3c + 3d must equal 3a)</i>	kg	3 c. Quantity in wastes treated to destroy the chemical	kg
3 b. Quantity lost to the environment	kg± %	3 d. Quantity in wastes not treated to destroy the chemical	kg± %

Activity (1)	Process category (2)	Quantity (kilograms) (3)	Total worker-hours (4)	Total workers (5)
4. Manufacture of the chemical	a. Enclosed			
	b. Controlled release			
	c. Open			
5. On-site use as a reactant Total Quantity _____ kg	a. Enclosed			
	b. Controlled release			
	c. Open			
6. On-site nonreactant use of the chemical substance Total Quantity _____ kg	a. Enclosed			
	b. Controlled release			
	c. Open			
7. On-site preparation of products Total Quantity _____ kg	a. Enclosed			
	b. Controlled release			
	c. Open			

8. MANUFACTURER'S PRODUCTS – Report on the quantity of the chemical substance that you prepare for each of the following

INDUSTRIAL PRODUCTS (domestic)	a. Chemical or mixture	kg	CONSUMER PRODUCTS (domestic)	d. Chemical or mixture	kg
	b. Article with some release	kg		e. Article with some release	kg
	c. Article with no release	kg		f. Article with no release	kg
g. Products for export _____ →				kg	

► **Part B – Chemical Substance Processing by Customers** – Information in part B must be accurate within ± 50%.

9. CUSTOMERS' USES AND PRODUCTS – Estimate the quantity of the chemical substance that your customers use or prepare for each of the following.

INDUSTRIAL PRODUCTS (domestic)	a. Chemical or mixture	kg	CONSUMER PRODUCTS (domestic)	d. Chemical or mixture	kg
	b. Article with some release	kg		e. Article with some release	kg
	c. Article with no release	kg		f. Article with no release	kg
g. Products for export _____ →				kg	
h. Quantity of chemical consumed as reactant _____ →				kg	
i. Unknown customer uses _____ →				kg	

10. MARKET NAMES – If you report your customers' uses as unknown (9i above) for more than 20% of the total quantity of the chemical substance that you manufacture and import (20% of items 1 and 2 above), list the market names under which you distribute the chemical (if you need more space, attach an additional sheet.)

a.	c.
b.	d.

11. CUSTOMERS' PROCESS CATEGORIES – Based on your knowledge of general industry practices, estimate the quantity of the chemical substance that you sell to customers as the chemical and that your customers further process in each of the following categories.

a. Enclosed processes	kg	c. Open processes	kg
b. Controlled release processes	kg	d. Unknown	kg

INSTRUCTIONS FOR MANUFACTURER'S REPORT FORM PRELIMINARY ASSESSMENT INFORMATION

What chemicals to report – This form applies to substances that are listed in 40 CFR 712.30.

Do not report on listed chemical substances if these are manufactured or imported incidentally as a byproduct, non-isolated intermediate, or impurity.

A byproduct or co-product must be reported if it's marketed or used as a subject (listed) chemical.

Do not report a listed chemical substance if it is a component of a mixture (imported or manufactured). Note, though, that the mixture itself may be listed as a reportable substance. Reporting is required, however, if the chemical is manufactured separately by a given company, and then blended into a mixture. In such a case, the blending step(s) would be reported as processing activities. Reporting is also required if the manufactured or imported chemical is (1) in aqueous solution; (2) in a solution containing an additive (such as a stabilizer or other chemical) to maintain the integrity or physical form of the substance; or (3) present in any grade or purity.

Reporting Period – Enter the months and years beginning and ending the 12-month period for which you report (e.g., July 81 - June 82). This reporting period is listed with the chemical substance in 40 CFR 712.30.

Who must report – Manufacturers and importers must report. See 40 CFR 712.25 for exemptions from reporting. In addition to the actual synthesis of a compound, all refining, extracting, and purifying activities of a listed chemical substance are considered manufacturing activities under Section 3(7) of TSCA (15 U.S.C. 2602(7)). Reporting is required for all companies involved in any of these activities.

Repackaging is considered a processing activity and should not be reported as manufacture. A company that only repackages a listed chemical substance is considered only a processor. Note, however, that if the company imports the chemical prior to repackaging it is considered a manufacturer and must report.

How many forms to complete – For each chemical, complete a separate form for each plant site that manufactured the chemical.

If a site manufactured and imported the chemical, report both manufacture and import data on a single form.

A company that imported the chemical, but did not process the imported quantity or manufacture an additional quantity, may submit a separate form for each import site or may submit a single form with the total data for all import sites.

Who may submit forms – Companies may choose to complete and submit forms to EPA from each plant site directly, or through company headquarters.

Retention of forms – You should keep a copy of each completed form. Refer to the preprinted Control Number (shown in the upper right corner on the front of the form) when communicating with EPA.

EPA Assistance – For further information or to obtain copies of the Manufacturer's Report form, contact:

Environmental Assistance Division,
Office of Pollution Prevention and Toxics (7408),
Environmental Protection Agency,
1200 Pennsylvania Ave., NW.,
Washington, DC 20460;
Telephone (TSCA Hotline): (202) 554-1404
E-mail: TSCA-Hotline@epa.gov.
Internet: <http://www.epa.gov/opptintr/chemtest/info.htm>

Paperwork Reduction Action Notice: The public reporting and record keeping burden for this collection is estimated to average 31.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Director, Collection Strategies Division (Mail Code 2822T), U.S. Environmental Protection Agency, Washington, DC 20460. Include the OMB control number in any correspondence, but do not submit the form or report to this address. The actual information or form should be submitted in accordance with the instructions accompanying the information or form, specified in the corresponding regulation.

I. CERTIFICATION

Technical certification – Certify the technical accuracy of data you report on the form by signing and dating the Technical Certification Statement. Print or type the name and title of the person who signs this statement.

Confidentiality certification – You may claim information confidential by marking appropriate boxes in sections III and IV. If you claim any information confidential, you must certify that the Confidentiality Statements are true for all information claimed confidential on the form. Do this by signing and dating the Confidentiality Certification Statement. Remember: To claim confidentiality, both the appropriate box must be marked and the confidentiality certification must be signed by personnel with designated authority (e.g., general counsel or corporate office in charge).

II. CHEMICAL IDENTIFICATION (*Complete A or B*)

Item A – If you are reporting on a chemical that has its CAS Number and Chemical Name listed in 40 CFR 712.30, rather than on a confidential chemical described in Item B below, enter the CAS Number and the first fifteen (15) characters of the listed Chemical Name.

Enter N/A in section II, part B, in the spaces for Category Name and Inventory Form C Number.

Item B – If you are reporting a confidential chemical that is in a category listed in 40 CFR 712.30, enter the Category Name as listed, and enter the number of the Inventory Reporting Form C on which you reported the chemical for the TSCA Inventory. (If the Inventory Form C Number is not available, contact the TSCA Hotline.)

In section II, part A, enter N/A in the spaces for CAS Number and Chemical Name.

III. RESPONDENT IDENTIFICATION

Confidentiality – Mark this box to claim confidential all Respondent Identification in section III. Note that you may not claim your identity confidential if you reported this chemical for the Inventory and did not claim your identity confidential at that time.

Item A – Enter the name, physical location address, and Dun and Bradstreet number of the plant site for which the data are reported.

If your company imported but did not further process or manufacture additional chemicals, and you choose to submit data for all import sites on a single form, enter N/A.

If the plant site does not have a Dun and Bradstreet number, enter N/A.

Item B – Mark the appropriate box to show whether the plant site or corporate headquarters is submitting this form. Enter the corresponding name and mailing address.

If corporate headquarters submits this form, enter its Dun and Bradstreet number, or if the the plant site submits this form, enter N/A in the space for the Dun and Bradstreet number.

EPA will send all correspondence regarding the form to this address.

Item C – Enter the name, title, and telephone number (including area code) of a person for EPA to contact if there are questions about the data reported on this form.

Item D – EPA will acknowledge receipt of the form to the person named in this item.

IV. PRELIMINARY ASSESSMENT INFORMATION

TSCA Regulable Quantities – Except under items 4 and 5, do not report any quantity of chemical substance that is manufactured or processed solely for use as: a pesticide; tobacco or any tobacco product; any source material, special nuclear material, or byproduct material (as terms defined in the Atomic Energy Act of 1954 and regulations issued under such Act); firearms or ammunition; or food, food additives, drug, cosmetic, or device (as such terms are defined in section 201 of the Federal Food, Drug and Cosmetic Act). The above are not TSCA regulable.

Some of the chemical substances are manufactured for both TSCA and non-TSCA regulable purposes. If a chemical from a given manufacturing stream is solely for a non-TSCA use, no reporting is required. However, if a company produces a chemical from the same stream that will be used for both TSCA and non-TSCA purposes, the total quantity must be reported under items 4 and 5. Note that the quantity produced for TSCA purposes only is entered under item 2.

PART A: PLANT SITE ACTIVITIES

Accuracy – For each item, provide numbers that represent your best estimates based on readily obtainable data.

Item 1 – Enter the total quantity of the chemical substance imported in bulk during the reporting period. For a given compound, if a company is not involved in any manufacturing activity, and imports a chemical at one site and processes it at another facility, answers need to be provided only for item 1 and items 9 through 11 (Part B). Note that the transfer of chemical to another site of the same company for processing is treated as if it were a customer use.

Item 2 – Enter the total quantity of chemical domestically manufactured for TSCA use during the reporting period, not counting the losses reported in item 3.

Item 3a–3d – In 3a, report the total quantity lost in manufacture of the substance during the reporting period. Report only routine losses. Do not report unusual spills or accidents. In calculating estimates for quantities not recovered you may: (1) use measured losses, if available, or emission factors and other calculated releases from individual sources; or (2) if these are not available, or only account for a portion of the total loss, you may make a simple mass balance estimate of the expected yield minus actual yield, where actual yield is the value reported in item 2. This quantity in 3a should then be broken down into three categories below (i.e., 3b + 3c + 3d = 3a). Specify the accuracy you report for 3b, 3c, and 3d, e.g., 1000 kg ± 30%.

3b. Quantity lost to the environment – This covers fugitive emissions to the atmosphere and other losses not described in 3c and 3d.

3c. Quantity in wastes treated to destroy the chemical.

3d. Quantity in wastes not treated to destroy the chemical – This includes, for example, any quantity disposed of in a landfill, surface impoundment, municipal sewage, or storage.

Items 4–7 – Items 4–7 in part A require you to describe the manufacturing process and your use of the chemical in terms of the number of workers and quantity of substance associated with three process categories. Three process categories are described below, followed by instructions for calculating quantities, worker-hours, and number of workers. Additional instructions concerning items 4 through 7 are also listed.

PROCESS CATEGORIES

Enclosed Process – The process is designed and operated so that there is no intentional release of the chemical. In this process category, only fugitive or inadvertent releases occur and special measures are taken to prevent worker exposure and environmental contamination. “Special measures” refer to procedures and equipment that are monitored and used to prevent worker exposure, and scrubbers and other recovery equipment employed to prevent environmental release. Equipment with emergency pressure relief venting would be allowed in this category; routine venting would not. With regard to handling the manufactured chemical, persons who handle closed packages containing the material would be counted under “enclosed process.” Person who package or transfer the unpackaged chemical would be counted in one of the following categories.

Controlled Release Process – The process is operated in a controlled manner to minimize the release of the chemical into the workplace. Release should generally be within prescribed limits. These limits may be dictated by government regulations or by company guidelines. If the chemical is vented outside the plant, the process is a “controlled release” process. Do not count general space ventilation fans.

Open Process – The chemical is routinely in direct contact with the atmosphere (workplace or outside the plant) and no measures are taken to prevent release. Routine direct contact would be associated, for example, with reaction vessels that are open vats, the transport or storage of the chemical in open containers (even in an otherwise enclosed process), and the venting of a chemical freely into the workplace atmosphere.

QUANTITIES

Process Category – Enter the greatest quantity that is processed in each process category. If there is more than one process stream, calculate each stream separately and then add the values for each process category. If a quantity of the chemical passes in a series through an enclosed process and then passes through an open process, the same quantity would be reported twice, once under each process category. (The sum of these quantities may be greater than 100% of the total quantity manufactured.)

Example 1 – A company manufactures technical grade chemical x in four steps.

350,000 kg —→ 350,000 kg —→ 350,000 kg —→ 200,000 kg
Open Enclosed Open Enclosed

The company would report:

Enclosed 350,000 kg
Controlled release 0
Open 350,000 kg

Example 2 – A company produces the same chemical in a reagent and technical grade with the following steps.

Technical Grade Process:

350,000 kg —→ 350,000 kg —→ 350,000 kg —→ 200,000 kg
Open Enclosed Open Enclosed

Reagent Grade Process:

650,000 kg —→ 500,000 kg —→ 500,000 kg —→ 400,000 kg
Controlled Controlled Open Open
Release Release

The company would report:

Enclosed 350,000 kg
Controlled release 650,000 kg
Open 850,000 kg

(The open process amount is the total of the maximum quantity in the open process category from each grade.)

Total Quantity – For items 5, 6, and 7, enter the total quantity processed in all process categories. (This total may be less than the sum of the quantities reported in the individual process categories.)

WORKER-HOURS

Worker-hours may be calculated for a given process category by multiplying the average number of full-time employees needed for the operation by the number of hours operating annually. Alternatively, worker-hour information may be taken from preexisting information source such as resource planning or budget figures.

WORKERS

Report the total number of workers for each process category. Workers are counted in a process category if (1) they are directly involved in manufacturing, processing, and handling the chemical during the reporting period or (2) they are regularly assigned maintenance or inspection

personnel who work with the process from a remote control room, and who do not regularly come in contact with the actual chemical stream, are not to be counted unless their exposure to the chemical stream is greater than or equal to that of regularly assigned inspection and maintenance workers. If only control room workers are associated with a process, and their exposure to the chemical stream is less than that of regularly assigned inspection and maintenance workers, the company must nevertheless report the process categories associated with the manufacture and on-site use of the chemical (column 3 in items 4 through 7). The number of workers and total worker-hours however may be listed as zero.

Three process categories are described in the form: enclosed, controlled release, and open. A worker should be counted as working with only one process category. If he operates several process types, count him under the one with which he spends the most time. If he spends an equal amount of time with several, count him under the most open process.

Example 3 – A company manufactured 1,000,000 kg of a chemical substance. It manufactured the chemical for all twelve months of the year and did so in an enclosed process.

In order to run the production line, ten (10) workers were present working 40 hour weeks; thus over the course of the year 20,800 worker-hours were used to run the production line.

Over the course of the year, twelve (12) different workers worked on the production of the chemical.

The form would then be filled out as follows:

<u>Process category</u>	<u>Quantity (kg)</u>	<u>Worker-hours</u>	<u>Total workers</u>
Open	0	0	0
Controlled release	0	0	0
Enclosed	1,000,000 kg	20.800	12

Example 4 – A company manufactured 1,000,000 kg of a chemical substance. It manufactured the chemical for the entire year in a 24 hour/day process consisting of three steps in the open, controlled release, and open process categories. The production line was shut down for maintenance for 2 weeks of the years. The production line had three 8-hour shifts. Each shift in step 1 required 5 workers, while 7 and 10 workers were needed per shift in steps 2 and 3, respectively. The total worker-hours required for each step follows:

<u>Process category</u>	(Shifts/day x hours/shift x workers x days/week x weeks/year)	<u>Workers-hours</u>
Open (Step 1)	(3 x 8 x 5 x 7 x 50)	42,000
Controlled (step 2)	(3 x 8 x 7 x 7 x 50)	58,800
Open (step 3)	(3 x 8 x 10 x 7 x 50)	84,000

Analysis of the personnel records showed that a total of 75 individuals worked on the production of the chemical. After examining the personnel records, the company was able to fill in the following table:

<u>Process category</u>	<u>Total workers</u>
Open (Step 1)	21
Controlled (step 2)	19
Open (step 3)	<u>35</u>
	75

Note that some workers are not double counted or “split” even though some jobs may require moving from one step of the process to another step of the same process. An employee working on both step 1 and step 2 is counted only in step 1 if he/she spends most of his time at that step. After adding together steps in the same process category, the company would report as follows:

<u>Process category</u>	<u>Quantity (kg)</u>	<u>Worker-hours</u>	<u>Total workers</u>
Open	1,000,000 kg	126,000	56
Controlled release	1,000,000 kg	58,800	19
Enclosed	0	0	0

Item 4 – This item applies to the manufacture of the chemical substance and includes all steps to ready the chemical for further processing or use.

Item 5 – This item applies to the use of the chemical at your plant site as a reactant in the manufacture of another chemical substance, where the molecular structure of the chemical is altered by breaking chemical bonds or making new chemical bonds between the original substance and some other substance. Report on all processing up to and including the actual reaction step and any ancillary steps which recycle unreacted chemicals back to the reactor vessel. Do not report on subsequent activities in this question.

Item 6 – Report the quantity of the chemical substance that you use on site. Examples include cleaning solvents, dielectric fluids, emulsifiers, and lubricants. Do not report any quantity that you react to make a product.

Item 7 – Report the quantity of the chemical substance that you process at the manufacturing site into products for on site use or sale. (Note that this does not include manufacture of the chemical substance; this is reported in item 4 above.) This items does not include the quantity of chemical substance that you incorporate into a mixture or article. Report the steps up to and including incorporation of the chemical into an article; do not include any further processing of the article.

Item 8 – Report the quantity of the chemical substance that you prepare for commercial distribution in each of the product types in 8a to 8g. Do not include any quantity of chemical substance that your customers will further process. This will be reported in item 9.

In items 8a to 8f, report the quantity of the chemical substance in products that are for domestic use. If you are uncertain about whether your products are for domestic or foreign use, report them as domestic.

The products are divided into industrial and consumer products. “Industrial” means the manufacturing and service industries covered by the North American Industry Classification System codes. Products meant to be used primarily by the general population are considered to be “consumer” products. The following definition from the Consumer Product Safety Act can be used as a guide (15 U.S.C. 2052(a)(1)): “The term ‘consumer product’ means any article, or component part thereof, produced or distributed (i) for sale to a consumer for use in or around a permanent or temporary household or residence, a school, in recreation, or otherwise, or (ii) for the personal use consumption or enjoyment of a consumer in or around a permanent or temporary household or residence, a school, in recreation, or otherwise.” If you are uncertain about whether your products are industrial or consumer, report them as consumer.

Three types of industrial and consumer product types are described below.

“Chemical substance or mixture” means a chemical, or mixture containing the chemical, that is used directly by the persons using the product, e.g., cleaners, paints, inks, deodorizers, solvents, etc. This includes chemicals or mixtures in containers or other articles whose purpose is to release the chemical (e.g., cans of spray paint, ink pens, and other applicators).

“Articles or products with no release” are articles constructed to prevent human exposure to or release to the environment of the chemical substance during normal use and storage (e.g., chemical coatings on internal components, and chemicals inside sealed articles as in thermometers and batteries).

“Articles or products with some release” are articles whose material components are made of chemicals which come in direct contact with persons using the article, the atmosphere, land or water; e.g., exposure can come from leaching evaporation, or surface contact. This includes such articles as plastic containers, chemically treated textiles, printed paper, coated appliances, etc. If the chemical itself is sold in a bottle or other container it should be reported under “Chemical substance or mixture,” not as an article. Only the container itself is an article for purposes of this form; the substance it contains is not a component of an article.

In item 8g, report the quantity of chemical substance that you export directly either as the chemical or contained in mixtures or articles.

Item 9 – Estimate the quantity of the chemical substance that your customers process for each of the uses listed in items 9a to 9h. (Do not include the quantity of chemical substances that your customers will use without further processing; that quantity should be reported in item 8a or 8d.)

For items 9a to 9g, follow the same directions as for 8a to 8g.

For item 9h, report the quantity of chemical substance for which your customers’ uses are unknown.

Report your best estimate for items 9a to 9h within $\pm 50\%$. If you cannot estimate an item to this degree of accuracy, include the quantity in item 9i. You may report “unknown” if the data would reveal information subject to a confidentiality agreement between you and your customers.

Item 10 – If you report your customers’ uses as unknown (item 9i above) for more than 20% of the total quantity that you manufacture and import (items 1 and 2 above) list the names under which you distribute the chemical substance.

This item will allow EPA, if necessary, to find out about the chemical uses you have reported as “unknown” by requiring processors of your products to report directly to us.

Item 11 – This item addresses your general knowledge of the process types your customers use to process the chemical. Estimate the quantity of the chemical that your customers process in each of the three process categories. Specify “unknown” if you do not know to within $\pm 50\%$.