Header Sheet for Creating Extra PMN Submission Pages:

If your PMN needs extra pages, or is a consolidated PMN, fill out this page to instruct the electronic form on how many additional pages will be needed prior to entering your submission data. If this is not a consolidated form AND you do not require extra pages, you may skip this header page and proceed to the PMN form on the following page.

	or consolid not a consolid											
1.	Enter the prenotice communication number here											
2.	Does this con	solidate	ed PMN f	orm co	ver polyme	er or nonpo	olymer su	ıbstances	?			
	Polymer			Nonpo	olymer							
3.	How many su	ıbstanc	es were a	ipprove	ed for cons	olidation?						
	2	3	4	5	6							
	sed on your a ymer) and 6 a		above, th	nis soft	ware will g	enerate re	quired ac	lditional c	opies of p	ages 4 (if	nonpolyme	er) or 5 (if
the EA	Do you need correspondin CH substance nd/or page 9	ig box f e, althou	or the recugh you r	juired e nay not	extra pages t need the	s below: (extra page	The corre	esponding substance	pages yo ce. If you	u check v need mor	vill be gene e than one	rated for
	8		9		10	11		13				
Fo	or any Secti	ion 5 s	submiss	ion, co	onsolidat	ed or no	t:					
	For additional						exposure	s resultin	g from ma	nufacturir	ng and prod	cessing),
	8		9									
	If you have er k on the follov								requested	additiona	al pages un	der step 5,
	e software will ut from you w					of pages.	This will	take seve	eral minute	es, and wi	II not requi	re additional

Note: The PMN pages will be automatically numbered. This header page will not be included in the page count showing

on the form itself.

	Form Approved. O.M.B. No. 2070-0224. Approval Expires 11-30-20
U.S. ENVIRONMENTAL PROTECTION AC	
	Date of receipt
PREMANUFACTU	TRE
SEPA PREMANUFACION NOTICE	
YCPA NOTICE	
FOR NEW CHEMICAL SUBSTA	ANCES
When DOCUMENT CONTROL OFFICER Completed OFFICE OF POLLUTION PREVENTION	DN .
send this AND TOXIC SUBSTANCES, 7407	JIN .
form to U.S. E.P.A. 1200 Pennsylvania, NW WASHINGTON, D.C. 20460	
Enter the total number of pages	Document control number EPA case number
in the Premanufacture Notice GENERAL INSTRUCT	TIONS TS -
	ti ti sk known to or reasonably ascertainable by you. Make reasonable estimates if you do
not have actual data.	l for Premanufacture Notification" (the Instructions Manual is available from the Toxic
Substances Control Act (TSCA) Information Service by calling 202-554-	-1404, or faxing 202-554-5603).
	in the boxes above the TS-user fee identification number you have generated. Remember, nittance, which is sent to EPA, Washington Financial Management Center (3303), P.O.
360399M, Pittsburgh, PA 15251-6399, Attn. TSCA User fee.	
Part I — GENERAL INFORMATION	TEST DATA AND OTHER DATA
You must provide the currently correct Chemical Abstracts (CA) Name of the new chemical substance, even if you claim the identity as confidential. You may authorize	You are required to submit all test data in your possession or control and to provide a description of all other data known to or reasonably ascertainable by
another person to submit chemical identity information for you, but your submission will not be complete and the review will not begin until EPA receives this information. A lette	you, if these data are related to the health and environmental effects on the
in support of your submission should reference your TS user fee identification number.	manufacture, processing, distribution in commerce, use, or disposal of the new chemical substance. Standard literature citations may be submitted for data in the
You must submit an original and two copies of this notice including all test data. If you claimed any information as confidential, a single sanitized copy must also be submitted.	open scientific literature. Complete test data (written in English), not summaries
	of data, must be submitted if they do not appear in the open literature. You should clearly identify whether test data is on the substance or on an analog. Also, the
Part II — HUMAN EXPOSURE AND ENVIRONMENTAL RELEASE	chemical composition of the tested material should be characterized. Following
If there are several manufacture, processing, or use operations to be described in Part II,	are examples of test data and other data. Data should be submitted according to the requirements of §720.50 of the Premanufacture Notification Rule (40 CFR
sections A and B of this notice, reproduce the sections as needed.	Part 720).
Part III — LIST OF ATTACHMENTS	Test Data (Check Below any included in this notice)
Attach additional sheets if there is not enough space to answer a question fully. Label eac continuation sheet with the corresponding section heading. In Part III, list these	ch • Environmental fate data
attachments, any test data or other data and any optional information included in the notice	ee. • Health effects data
	Environmental effects data Yes Structure/activity relationships
OPTIONAL INFORMATION	Physical/Chemical Properties* Yes Test data not in the possession
You may include any information that you want EPA to consider in evaluating the new	or control of the submitter
substance. On page 11 of this form, space has been provided for you to describe pollution prevention and recycling information you may have regarding the new substance	 A physical and chemical properties worksheet is located on the last page of this form. e.
So-called "binding" boxes are included throughout this form for you to indicate your	TYPE OF NOTICE (Check Only One)
willingness to be bound to certain statements you make in this section, such as use, production volume, protective equipment This option is intended to reduce delays that	PMN (Premanufacture Notice)
routinely accompany the development of consent orders or Significant New Use Rules. Except in the case of exemption applications (such as TMEA, LVE, LOREX) where	INTERMEDIATE PMN (submitted in sequence with final product PMN)
certain information provided in such notification is binding on the submitter when the	
Agency approves the exemption application, checking a binding box in this notice <u>does not</u> by itself prohibit the submitter from later deviating from the information (except chemical	
identity) reported in the form.	TMEA (Test Marketing Exemption Application)
CONFIDENTIALITY CLAIMS	LVE (Low Volume Exemption) @ 40 CFR 723.50(c)(1)
You may claim any information in this notice as confidential. To assert a claim on the form, mark (X) the confidential box next to the information that you claim as confidential.	LOREX (Low Release/Low Exposure Exemption) @ 40 CFR 723.50(c)(2)
To assert a claim in an attachment, circle or bracket the information you claim as confidential. If you claim information in the notices as confidential, you must also provide a sanitized version of the notice, (including attachments). For additional instructions on	LVE Modification LOREX Modification
claiming information as confidential, read the Instructions Manual.	IS THIS A CONSOLIDATED PMN? Yes
Vark (x) if any information in this notice is claimed as confidential.	# of chemicals or polymers
	(Prenotice Communication # required, enter # on page 3)

Paperwork Reduction Act Notice: This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2070-0224). Responses to this collection of information are mandatory for certain persons, as specified at 15 U.S.C. 2604 and 40 CFR Parts 720, 721, 723 and 725. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information is estimated to be 110 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Information Engagement Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address. **CERTIFICATION** -- A Printed copy of this signature page, with original signature, must be submitted I certify that to the best of my knowledge and belief: The company named in Part I, section A, subsection 1a of this notice form intends to manufacture or import for a

- commercial purpose, other than in small quantities solely for research and development, the substance identified in Part I, Section B.
- All information provided in this notice is complete and truthful as of the date of submission.

3.	I am submitting with this notice all test data in my possession or control and a description of all other data known to or reasonably ascertainable by me as required by §720.50 of the Premanufacture Notification Rule.								
Ad	Additional Certification Statements:								
•	If you are submitting a PMN, Intermediate PMN, Consolidated PMN, or SNUN, check the following us statement that applies:	ser fee certification							
	☐ The Company named in Part I, Section A has remitted the fee of \$2500 specified in 40 CFR 700.45	5(b), or							
	The Company named in Part I, Section A has remitted the fee of \$1000 for an Intermediate PMN (of 700.43) in accordance with 40 CFR 700.45(b), or	defined @ 40 CFR							
	☐ The Company named in Part I Section A is a small business concern under 40 CFR 700.43 and has in accordance with 40 CFR 700.45(b).	The Company named in Part I Section A is a small business concern under 40 CFR 700.43 and has remitted a fee of \$100 in accordance with 40 CFR 700.45(b).							
and	If you are submitting a low volume exemption (LVE) application in accordance with 40 CFR 723.50(c) and low exposure exemption (LoRex) application in accordance with 40 CFR 723.50(c)(2), check the statements:								
	The manufacturer submitting this notice intends to manufacture or import the new chemical substant purposes, other than in small quantities solely for research and development, under the terms of 40								
	☐ The manufacturer is familiar with the terms of this section and will comply with those terms; and								
	☐ The new chemical substance for which the notice is submitted meets all applicable exemption cond	itions.							
	If this application is for an LVE in accordance with 40 CFR 723.50(c)(1), the manufacturer intends manufacture of the exempted substance for commercial purposes within 1 year of the date of the exercise period.								
	The accuracy of the statements you make in this notice should reflect your best prediction of the anticipated facts regarding the chemical subst lescribed herein. Any knowing and willful misinterpretation is subject to criminal penalty pursuant to 18 USC 1001.	ance Confidential							
Signatu	Signature and title of Authorized Official (Original Signature Required)								
Signatu	Signature of agent - (if applicable) Date								

			Part I G	ENERAI	L INFO	RMATION				ı
Se	ection A SUBMI	TTER IDENTIFICATION					~			Confi-
1	Person	Mark () the "Con Name of authorized official	nfidential" box ne	xt to any su	bsection y Posi		ndential			dential
ıa.	Submitting	Name of authorized official			POSI	uon				
	Notice (in U.S.)									
		Company								
		•								
		-								
		Mailing address (number and s	treet)							
		City, State	1 1	Postal Code						
		City, State	1	ostar Code						
b.	Agent (if	Name of authorized official	•		Posi	tion				
	applicable)									
		~								
		Company								
		Mailing address (number and s	treet)							
		waring address (number and s	dect)							
		City, State		Postal Co	de					
c.	If you are submitt	ing this notice as part of a joint s	ubmission, mark	(X) this box					ightharpoonup	
Ioi	nt Submitter (if	Name of authorized official			Posi	tion				
JUI	applicable)	Name of authorized official			1 081	uon				
		Company			<u> </u>					
		r								
		Mailing address (number and s	treet)				City, State			
		B : G :	-	D . 1 G 1		<u> </u>				
		Province, Country		Postal Code	2					
2.	Technical	Name of authorized official	<u></u>		Posi	tion				
	Contact (in									
	U.S.)									
		Company								
		M '1' 11 / 1 1								
		Mailing address (number and s	treet)							
		City, State		Postal Code		Telephone	Area Code	Number		
		•								
3.		renotice communication (PC) concern			· -	_		_		
	EPA assigned a PC	Number to the notice, enter the number	ber.				Mark (X)	—		
							if none			
4.		abmitted an exemption application for								
		by this notice, enter the exemption nu- ously submitted a PMN for this substan					Mark (X)			
		y EPA (i.e. withdrawn or incomplete).					if none			
5.	If you have submit	ted a notice of Bona fide intent to man	ufacture or import							
		bstance covered by this notice, enter the	he notice number				Mark (X)			
	assigned by EPA.	_					if none		_	
		1.	Manufacture		2.	Import	ı	I		<u>I</u>
6.	Type of Notice	- Mark (X)	Only	ı	۷.	Only		I I 3. Bo	oth	
			Binding Option	i i		Binding C		!		
			Mark (X)	· [Mark (X)	Priori	I I		
			` /			\ - /				

Part I GENERAL I	NFORMATION Continued		
Section B CHEMICAL IDENTITY INFORMATION:	You must provide a currently correct Chemical Abstrac Collective Index (9CI) of CA nomenclature rules and co	ts (CA) name of the substance base onventions.	ed on the ninth
Mark (X) the "Confidential" box	next to any item you claim as confidential		
Complete either item 1 (Class 1 or 2 substances) or 2 (Polymers) as a	appropriate. Complete all other items.		
If another person will submit chemical identity information for you (Identify the name, company, and address of that person in a continua		it.	Confi- dential
1. Class 1 or 2 chemical substances (for definitions of class 1 and class 2 substances)			
a. Class of substance - Mark (X) 1 Class 1 or	2 Class 2		
 Chemical name (Currently correct Chemical Abstracts (CA) Name that Class 1 substances a CA Index Name must be provided. For Class 2 su which ever is appropriate based on CA 9CI nomenclature rules and con 	ibstances either a CA Index Name or CA Preferred	Name must be provided,	
c. Please identify which method you used to develop or obtain the specifi	ed chemical identity information reported in this no	otice: (check one).	
Method 1 (CAS Inventory Expert Service - a copy of the Ident report obtained from the CAS Inventory Expert Services must submitted as an attachment to this notice)			
d. Molecular formula		CAS Registry Number	
		(if a number already exists for the substance)	
e. For a class 1 substance, provide a complete and correct chemical struct	ure diagram. For a class 2 substance, provide a co	rrect representative or	<u> </u>
partial chemical structure diagram, as complete as can be known, if on discussion of "native format" diagram software which can be helpful in	e can be reasonably ascertained. Please see the E-F		
Mark (X) this box if you attach a continuation sheet.			

For a class 2 substance - (1) List the immediate precursor substances with their respective CAS Registry Numbers. (2) Describe the nature of the reaction (3) Indicate the range of composition and the typical composition (where appropriate).	or process.
e. (1) List the immediate precursor substances with their respective CAS Registry Numbers. Name (CAS #)	Confi- dential
e. (2) Describe the nature of the reaction or process.	
e. (3) Indicate the range of composition and the typical composition (where appropriate).	
Mark (X) this box if you attach a continuation sheet	

Part I GENERAL INFOR	MATIO	N Continu	ed			
Section B CHEMICAL IDENTITY INFORMATION Continued 2. Polymers (For a definition of polymer, see the Instructions Manual.)						Confi-
						dential
 Indicate the number-average weight of the lowest molecular weight composition. Indicate maximum weight percent of low molecular weight species (not include below 1,000 absolute molecular weight of that composition. 					ow 500 and	
Describe the methods of measurement or the basis for your estimates: GPC		Other : (S)	pecify below	v)		
(i) lowest number average molecular weight:		_				
(ii) maximum weight % below 500 molecular weight:		_				
(iii) maximum weight % below 1000 molecular weight:		_				
Mark (X) this box if you attach a continuation sheet.						
 b. You must make separate confidentiality claims for monomer or other reactant i "Confidential" box next to any item you claim as confidential (1) - Provide the specific chemical name and CAS Registry Number (if a the polymer. (2) - Mark (X) this column if entry in column (1) is confidential. (3) - Indicate the typical weight percent of each monomer or other reacta (4) - Choose "yes" from drop down menu if you want a monomer or other 	number ex	sists) of each mon	nomer or otl	her reactant	used in the manu	ufacture of
 (4) - Choose yes from drop down field if you want a monomer of our description on the TSCA Chemical Substance Inventory. (5) - Mark (X) this column if entries in columns (3) and (4) are confident (6) - Indicate the maximum weight percent of each monomer or other reacommercial purposes. (7) - Mark (X) this column if entry in column (6) is confidential. 	tial.					
Monomer or other reactant and CAS Registry Number	Confi-	Typical	Include in	Confi-	Maximum	Confi-
(1)	dential (2)	composition (3)	identity (4)	dential (5)	residual (6)	dential (7)
(4)	(=)	%	(1)	(-)	%	(*)
		%			%	
		%			%	
		%			%	
		%			%	
		%			%	
		%			%	
		%			%	
		%			%	
		%			%	
		%			%	
		%			%	
		%			%	
Mark (X) this box if you attach a continuation sheet.		<u></u>			<u></u>	

c.	Please identify which method you used to develop or obtain the specified chemical identity information reported in this notice (check one). Method 1 (CAS Inventory Expert Service - a copy of the identification report Method 2 (other source)	CBI
	obtained from CAS Inventory Expert Service must be submitted as an attachment to this notice)	
d.	The currently correct Chemical Abstracts (CA) name for the polymer that is consistent with TSCA Inventory listings for similar polymers.	
	CAS Registry Number (if a number already exists for the substance)	
e.	Provide a correct representative or partial chemical structure diagram, as complete as can be known, if one can be reasonably ascertained. Please see the E-PMN Instruction Manual for discussion of "native format" diagram software which can be helpful in reviewing your substance.	
Ma	rk (X) this box if you attach a continuation sheet.	

Part 1 GENERAL INFORMATION Continued		
Section B CHEMICAL IDENTITY INFORMATION Continued		
 Impurities (a) - Identify each impurity that may be reasonably anticipated to be present in the chemical substance as manufacture the CAS Registry Number if available. If there are unidentified impurities, enter "unidentified." (b) - Estimate the maximum weight % of each impurity. If there are unidentified impurities, estimate their total weight 		Provide
Impurity and CAS Registry Number	Maximum	Confi-
	percent	dential
(a)	(b)	
	%	
	%	
	%	
	%	
	%	
	%	
	%	
	,,	
Mark (X) this box if you attach a continuation sheet.		
4. Synonyms - Enter any chemical synonyms for the new chemical identified in subsection 1 or 2.		Confi- dential
		dentiar
Mark (X) this box if you attach a continuation sheet.		
5. Trade identification - List trade names for the new chemical substance identified in subsection 1 or 2.		
Mark (X) this box if you attach a continuation sheet.		
6. Generic chemical name - If you claim chemical identify as confidential, you must provide a generic name for your substant the specific chemical identity of the new chemical substance to the maximum extent possible. Resulting TSCA Chemical Substance Inventory, 1985 Edition, Appendix B for guidance on developing generated as the specific chemical substance Inventory, 1985 Edition, Appendix B for guidance on developing generated as the specific chemical substance Inventory, 1985 Edition, Appendix B for guidance on developing generated as the specific chemical substance Inventory, 1985 Edition, Appendix B for guidance on developing generated as the specific chemical substance Inventory, 1985 Edition, Appendix B for guidance on developing generated as the specific chemical substance Inventory, 1985 Edition, Appendix B for guidance on developing generated as the specific chemical substance Inventory, 1985 Edition, Appendix B for guidance on developing generated as the specific chemical substance Inventory, 1985 Edition, Appendix B for guidance on developing generated as the specific chemical substance Inventory, 1985 Edition, Appendix B for guidance on developing generated as the specific chemical substance Inventory, 1985 Edition, Appendix B for guidance on developing generated as the specific chemical substance Inventory, 1985 Edition, Appendix B for guidance on developing generated as the specific chemical substance Inventory and Inventory as the specific chemical substance Invent	efer to the	
Mark (X) this box if you attach a continuation sheet. 7. Byproducts - Describe any byproducts resulting from the manufacture, processing, use, or disposal of the new chemical sun Number if available.	ubstance. Provide the CAS	Registry
	egistry Number	Confi-
(1)	(2)	dential
Mark (X) this box if you attach a continuation sheet.		

Part I GE					ON	Cont	tinued					
Section C PRODUCTION, IMPORT, AND U												
Mark (X) the "Confiden												
1. Production volume Estimate the maximum prod												
production volume for any consecutive 12-month pe												
substance basis. For a Low Volume Exemption app 10,000 kg/yr, specify the volume and mark (x) in the									product	ion volu	ime tha	n
	e oman	ng box.									onfi-	Binding
Maximum first 12-month production (kg/yr)							uction (ential	Option
(100% new chemical substance basis)			(100	% new	cnemi	cai sub	stance l	oasis)				Mark (x)
2 Use Information Voy must make concrete confidentialis	rr alaims	a for the d	agamimtian	af tha a	atagamı a	fuga th	2 maraant	of mrodu	vation val	uma dari	atad ta a	a a la
Use Information You must make separate confidentiality category, the formulation of the new substance, and other												eacn
a. (1)Describe each intended category of use of the no												1) is
confidential business information (CBI). (3)Indicate your will												
production for the first three years devoted to each category of u												
Estimate the percent of the new substance as formulated in mixture of the new substance of the new s												
your control associated with each category of use. (7)Mark (λ product volume expected for the listed "use" sectors. Mark more												
binding. (9)Mark (X) this column if entry(ies) in column (8) i							our willin	igness to	nave the	use type	provide	u iii (o)
Category of use (1) (by function and application i.e. a	CBI	Binding	Prod-	CBI	% in	CBI	%	of subst	ance expe	ected per	use	CBI
dispersive dye for finishing polyester fibers)		Option Mark	uction		Formu				(8)	1		
		(x)	%		lation							
	(2)	(3)	(4)	(5)	(6)	(7)	Site- limited	Cons- umer	Indus- trial	Com- mercial	Binding Option	(9)
			%		%				1		- priori	
			0/		0/				-			
			%		%							
			%		%							
			0/		0/							
			%		%							
			%		%							
			0/2		0/2				-			
			%		%							
			%		%							
* If you have identified a "consumer" use, please provide on a	continu	lation she	et a detail	led descr	intion of	the use(s	a) of this o	L chemical	substanc	e in cons	umer pro	oducts
In addition include estimates of the concentration of the new												
substance loses its identity in the consumer product.			_			_					-	
Mark (X) this box if you attach a continuation sheet.												
b. Generic use If you claim any category of use desc.			on 2a as	confident	tial, enter	a generi	c descrip	tion of tl	nat catego	ry. Read	the Inst	truction
description Manual for examples of generic us	e descrij	ptions.										
Mark (X) this box if you attach a continuation sheet.												
3. Hazard Information Include in the notice a copy of reason	nahla f	accimila	f any haz	ard warn	ing states	ment lah	el mater	ial cafats	, data sha	et or oth	er	Binding
information which will be provided to any person who is rea												Option
the safe handing, transport, use, or disposal of the new subst								v oqu	r-ment 0	radio		Mark (x)
		*			,						-	
Mark (X) this box if you attach hazard information.												

Part II-- HUMAN EXPOSURE AND ENVIRONMENTAL RELEASE Section A -- INDUSTRIAL SITES CONTROLLED BY THE SUBMITTER Mark (X) the "Confidential" box next to any item you claim as confidential Complete section A for each type of manufacture, processing, or use operation involving the new chemical substance at industrial sites you control. Importers do not have to complete this section for operations outside the U.S.; however, you may still have reporting requirements if there are further industrial processing or use operations after import. You must describe these operations. See instructions manual 1. Operation description Confi-Identity -- Enter the identity of the site at which the operation will occur. dential Name Site address (number and street) City, County, State, ZIP code If the same operation will occur at more than one site, enter the number of sites. Identify the additional sites on a continuation sheet, and if any of the sites have significantly different production rates or operations, include all the information requested in this section for those sites as attachments. Mark (X) this box if you attach a continuation sheet. b. Type --Mark (X) Manufacturing Use Processing Amount and Duration -- Complete 1 or 2 as appropriate Maximum kg/batch (100% new chemical Hours/batch Batches/year 1. Batch Maximum kg/day (100% new chemical Hours/day Days/year 2. Continuous d. Process description Mark (X) to indicate your willingness to have your process description binding. (1) Diagram the major unit operation steps and chemical conversions. Include interim storage and transport containers (specify- e.g. 5 gallon pails, 55 gallon drum, rail car, tank truck, etc.). Provide the identity, the approximate weight (by kg/day or kg/batch on a 100% new chemical substance basis), and entry point of all starting materials and feedstocks (including reactants, solvents, catalysts, etc.), and of all products, recycle streams, and wastes. Include cleaning chemicals (note frequency if not used daily or per batch.). Identify by number the points of release, including small or intermittent releases, to the environment of the new chemical substance. If releasing to two media at the same step, assign a second release number for the second medium.

Mark (X) this box if you attach a continuation sheet.

Part II-- HUMAN EXPOSURE AND ENVIRONMENTAL RELEASE -- Continued

Section A -- INDUSTRIAL SITES CONTROLLED BY THE SUBMITTER -- Continued

- 2. Occupational Exposure -- You must make separate confidentiality claims for the description of worker activity, physical form of the new chemical substance, number of works exposed, and duration of activity. Mark (X) the "Confidential" box next to any item you claim as confidential.
 - (1) -- Describe the activities (i.e. bag dumping, tote filling, unloading drums, sampling, cleaning, etc.) in which workers may be exposed to the substance.
 - (2) -- Mark (X) this column if entry in column (1) is confidential business information (CBI).
 - (3) -- Describe any protective equipment and engineering controls used to protect workers.
 - (4) and (6) -- Indicate your willingness to have the information provided in column (3) or (5) binding.
 - (5) -- Indicate the physical form(s) of the new chemical substance (e.g., solid: crystal, granule, powder, or dust) and % new chemical substance (if part of a mixture) at the time of exposure.
 - (7) -- Mark (X) this column if entry in column (5) is confidential business information (CBI).
 - (8) -- Estimate the maximum number of workers involved in each activity for all sites combined.
 - (9) -- Mark (X) this column if entry in column (8) is confidential business information (CBI).
 - (10) and (11) -- Estimate the maximum duration of the activity for any worker in hours per day and days per year.
 - (12) -- Mark (X) this column if entries in columns (10) and (11) are confidential business information (CBI).

Worker activity	CBI	Protective Equipment/	Binding	Physical forms(s)	Binding	CBI	# of	CBI	Maximum	duration	CBI
(i.e., bag dumping, filling drums)		Engineering Controls	Option	and % new	Option Mark (x)		Workers		Hrs/day	Days/yr	<u> </u>
	(2)		Option Mark (x) (4)	substance (5)	Mark (x) (6)	(7)	Exposed (8)	(9)	(10)	(11)	(12)
(1)	. ,	(3)		(-)		()	(8)	()	,		` ′
								-			
Mark (X) this box if you attac	h a con	tinuation sheet.									

- 3. Environmental Release and Disposal -- You must make separate confidentiality claims for the release number and the amount of the new chemical substance released and other release and disposal information. Mark (X) the "Confidential" box next to each item you claim as confidential.
 - (1) -- Enter the number of each release point identified in the process description, part II, section A, subsection 1d(3).
 - (2) -- Estimate the amount of the new substance released (a) directly to the environment or (b) into control technology (in kg/day or kg/batch).
 - (3) -- Mark (X) this column if entries in columns (1) and (2) are confidential business information (CBI).
 - (4) -- Identify the media (stack air, fugitive air (optional-see Instruction Manual), surface water, on-site or off-site land or incineration, POTW, or other (specify)) to which the new substance will be released from that release point.
 - (5) -- a. Describe control technology, if any, and control efficiency that will be used to limit the release of the new substance to the environment. For releases disposed of on land, characterize the disposal method and state whether it is approved for disposal of RCRA hazardous waste. On a continuation sheet, for each site describe any additional disposal methods that will be used and whether the waste is subject to secondary or tertiary on-site treatment. b. Estimate the amount released to the environment after control technology (in kg/day).
 - (6) -- Mark (X) this column if entries in columns (4) and (5) are confidential business information (CBI).
 - (7) -- Identify the destination(s) of releases to water. Please supply NPDES (National Pollutant Discharge Elimination System) numbers for direct discharges or NPDES numbers of the POTW (Publicly Owned Treatment Works). Mark (X) if the POTW name or NPDES # is confidential business information (CBI)

Release Amount of new Number substance released		CBI Medium of release		Control technology and efficiency (you may wish to optionally attach efficiency data)				
(1)	(2a)	(2b)	(3)	e.g. stack air (4)	(5a)	Binding Mark (X) (5b)		(6)
			(3)		(Ja)	(X)	(50)	(0)
(7) Mar	k (X) the c	lestination(s) of rele	eases to water.		NPDE	ES #	CBI
POTWprovide		1						
name(s)								
Naviaskla								
Navigable waterway provide name(s)								
Oth	erSpecify							
Mark	(X) this box	if you attach a	continua	tion sheet		·		·

Part II-- HUMAN EXPOSURE AND ENVIRONMENTAL RELEASE -- Continued

Se
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Complete section B for typical processing or use operations involving the new chemical substance at sites you do not control. Importers do not have to complete this section for operations outside the U.S.; however, you must report any processing or use activities after import. See the Instructions Manual. *Complete a separate section B for each type of processing, or use operation involving the new chemical substance*. If the same operation is performed at more than one site describe the typical operation common to these sites. Identify additional sites on a continuation sheet.

sites. Identify additional sites on a continuation sheet.		
1(a). Operation Description To claim information in this section as confidential, circle (1) Diagram the major unit operation steps and chemical conversions, including interim storag cars, tank trucks, etc). On the diagram, identify by letter and briefly describe each worker activi identity, the approximate weight (by kg/day or kg/batch, on an 100% new chemical substance by catalysts, etc) and all products, recycle streams, and wastes. Include cleaning chemicals (note from text field 1(b) below, identify by number the points of release, including small or intermittent related the # of sites (remember to identify the locations of these sites on a continuation sheet):	ge and transport containers (specify - e.g. 5 gallon pails, 55 gallon drugty. (2) Either in the diagram or in the text field 1(b) below, provide asis), and entry point of all feedstocks (including reactants, solvents are requency if not used daily or per batch). (3) Either in the diagram of leases, to the environment of the new chemical substance. (4) Please	ms, rail e the nd or in the
#	# of sites	
	L	
1(b). (Optional) This space is for a text description to clarify the diagram above.		
1(0). (Optional) This space is for a tox a description to charry the diagram above.		
Mark (X) this box if you attach a continuation sheet.		

Worker Exposure/Environmental Release

- (1) -- From the diagram above, provide the letter for each worker activity. Complete 2-8 for each worker activity described.
- (2) -- Estimate the number of workers exposed for all sites combined.
- (4) -- Estimate the typical duration of exposure per worker in (a) hours per day and (b) days per year.
- (6) -- Describe physical form of exposure and % new chemical substance (if in mixture), and any protective equipment and engineering controls, if any, used to protect workers
- (7) -- Estimate the percent of the new substance as formulated when packaged or used as a final product.
- (9) -- From the process diagram above, enter the number of each release point. Complete 9-13 for each release point identified.
- (10) -- Estimate the amount of the new substance released (a) directly to the environment or (b) into control technology to the environment (in kg/day or kg/batch).
- (12) -- Describe media of release i.e. stack air, fugitive air (optional-see Instructions Manual), surface water, on-site or off-site land or incineration, POTW, or other (specify) and control technology, if any, that will be used to limit the release of the new substance to the environment.

	# of Workers Exposed	CBI	Durat	ion Of	CBI				% in	
(1)	(2)		Exp	osure	СЫ	3) and (15) Mark (X) this column if any of the proceeding entries are confidential business information (CBI) Protective Equip. /Engineering Controls/Physical Form and/ % new substance				CBI
		(3)	(4a)	(4b)	(5)		(6)			(8)
										<u> </u>
Relea				Amount	of		CBI	Media of Release & Control Technology		CBI
Numb	umber New Substance Released		New Substance							
(9)		(10a) (10l					(11)	(12)		(13)
										<u> </u>
14) 1	Byproduc	ts:								(15)

OPTIONAL POLLUTION PREVENTION INFORMATION

To claim information in the following section as confidential circle or bracket the specific information that you claim as confidential In this section you may provide information not reported elsewhere in this form regarding your efforts to reduce or minimize potential risks associated with activities surrounding manufacturing, processing, use and disposal of the PMN substance. Please include new information pertinent to pollution prevention, including source reduction, recycling activities and safer processes or products available due to the new chemical substance. Source reduction includes the reduction in the amount or toxicity of chemical wastes by technological modification, process and procedure modification, product reformulation, raw materials substitution, and/or inventory control. Recycling refers to the reclamation of useful chemical components from wastes that would otherwise be treated or released as air emissions or water discharges, or land disposal. Descriptions of pollution prevention, source reduction and recycling should emphasize potential risk reduction subsequent to compliance with existing regulatory requirements and can be either quantitative or qualitative. The EPA is interested in the information to assess overall net reductions in toxicity or environmental releases and exposures, not the shifting of risks to other environmental media or nonenvironmental areas (e.g., occupational or consumer exposure). In addition, information on the relative cost or performance characteristics of the PMN substance to potential alternatives may be provided.

All information provided in this section will be taken into consideration during the review of this substance. See PMN Instructions Manual and Pollution Prevention Guidance manual for guidance and examples.

Optional Pollution Prevention Information (Continued) Describe the expected net benefits, such as (1) an overall reduction in human health or the environment; (2) a reduction in the volume manufactured; (3) a reduction in the generation of waste materials through recycling, source reduction or other means; (4) a reduction in potential toxicity or human exposure and/or environmental release; (5) an increase in product performance, a decrease in the cost of production and/or improved operation efficiency of the n chemical substance in comparison to existing chemical substances used in similar application; or (6) the extent to which the new	ew
chemical substance may be a substitute for an existing substance that poses a greater overall risk to human health or the environm	
	CBI
Mark (X) this box if you attach a continuation sheet	

Part III -- LIST OF ATTACHMENTS

Attach continuation sheets for sections of the form and test data and other data (including physical/chemical properties and structure/activity information), and optional information after this page. Clearly identify the attachment and the section of the form to which it relates, if appropriate. Number consecutively the pages of any paper attachments. In the column below, enter the inclusive page numbers of each attachment. Electronic attachments can be identified by filename.

Mark (X) the "Confidential" box next to any attachment name you claim as confidential. Read the Instructions Manual for guidance on how to claim any information in an attachment as confidential. You must include with the sanitized copy of the notice form a sanitized

version of any attachment in which you claim information as confidential.

#	on of any attachment in which you claim information as confidential. Attachment name	Attachment Filename	Attachment	Confi- dential	
i			page number(s)	dential	
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PHYSICAL AND CHEMICAL PROPERTIES WORKSHEET

To assist EPA's review of physical and chemical properties data, please complete the following worksheet for data you provide and include it in the notice. Identify the property measured, the page of the notice on which the property appears, the value of the property, the units in which the property is measured (as necessary), and whether or not the property is claimed as confidential. If the attachments are electronic, give the attachment number (found on page 12) at (b). The physical state of the neat substance should be provided. These measured properties should be for the neat (100% pure) chemical substance. Properties that are measured for mixtures or formulations should be so noted (% PMN substance in ___). You are not required to submit this worksheet; however, EPA strongly recommends that you do so, as it will simplify review and ensure that confidential information is properly protected. You should submit this worksheet as a supplement to your submission of test data. This worksheet is not a substitute for submission of test data.

this worksheet as a supplement to your submission of test data. This wo	Mark (X)	Page	Value		Confi- lential
(a)	if provided	number (b)	(c)	Ma	ark (X) (d)
Physical state of neat substance			(s)(l)(g)		
Vapor pressure @ Temperature°C			Torr		
Density/relative density			g/cm3		
Solubility @ Temperature°C					
Solvent			g/L		
Solubility in water @ Temperature°C			g/L		
Melting temperature			°C		
Boiling / sublimation temperature@torr pressure			°C		
Spectra					
Dissociation constant					
Particle size distribution					
Octanol / water partition coefficient					
Henry's Law constant					
Volatilization from water					
Volatilization from soil					
pH@ concentration					
Flammability					
Explodability					
Adsorption / coefficient					
Other - Specify					