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		Identification of the Substance/Misture and of the	o Company/Undortaking			
	Section 1.	Identification of the Substance/Mixture and of the	ne Company/Undertaking			
.1	Product Code:	23755				
	Product Name:	Ospemifene				
	Synonyms:	2-[4-[(1Z)-4-chloro-1,2-diphenyl-1-buten-1-yl]p	henoxy]-ethanol; FC-1271a;			
.2	Relevant identified uses of	of the substance or mixture and uses advised ag	ainst:			
	Relevant identified uses	For research use only, not for human or vetering	nary use.			
.3	Details of the Supplier of	the Safety Data Sheet:				
	Company Name: Cayman Chemical Company					
		1180 E. Ellsworth Rd.				
		Ann Arbor, MI 48108				
	Web site address: Information:	www.caymanchem.com	.4 (704)074 0005			
		Cayman Chemical Company	+1 (734)971-3335			
.4	Emergency telephone nu		4 (000) 10 1 0000			
	Emergency Contact:	CHEMTREC Within USA and Canada:	+1 (800)424-9300			
		CHEMTREC Outside USA and Canada:	+1 (703)527-3887			
		Section 2. Hazards Identification	ation			
2.1 2.2	Classification of the Subs Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements:), Category 1				
	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements:), Category 1 nic), Category 1				
	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements: GHS Signal Word:), Category 1				
	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements: GHS Signal Word: GHS Hazard Phrases:), Category 1 nic), Category 1 Warning				
	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements: GHS Signal Word: GHS Hazard Phrases: H400: Very toxic to aquat), Category 1 nic), Category 1 Warning tic life.				
	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements: GHS Signal Word: GHS Hazard Phrases: H400: Very toxic to aquat H410: Very toxic to aquat), Category 1 nic), Category 1 Warning tic life. tic life with long lasting effects.				
	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements: GHS Signal Word: GHS Hazard Phrases: H400: Very toxic to aquat), Category 1 nic), Category 1 Warning tic life. tic life with long lasting effects.				
	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements: GHS Signal Word: GHS Hazard Phrases: H400: Very toxic to aquat H410: Very toxic to aquat GHS Precaution Phrase P273: Avoid release to th), Category 1 hic), Category 1 Warning tic life. tic life with long lasting effects.				
	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements: GHS Signal Word: GHS Hazard Phrases: H400: Very toxic to aquat H410: Very toxic to aquat GHS Precaution Phrase P273: Avoid release to th GHS Response Phrases), Category 1 hic), Category 1 Warning tic life. tic life with long lasting effects.				
	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements: GHS Signal Word: GHS Hazard Phrases: H400: Very toxic to aquat H410: Very toxic to aquat GHS Precaution Phrases P273: Avoid release to th GHS Response Phrases P391: Collect spillage.), Category 1 hic), Category 1 Warning tic life. tic life with long lasting effects. es: ue environment.				
	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements: GHS Signal Word: GHS Hazard Phrases: H400: Very toxic to aquat H410: Very toxic to aquat H410: Very toxic to aquat GHS Precaution Phrase P273: Avoid release to th GHS Response Phrases P391: Collect spillage.), Category 1 hic), Category 1 Warning tic life. tic life with long lasting effects. es: ue environment. s: bsal Phrases:				
	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements: GHS Signal Word: GHS Hazard Phrases: H400: Very toxic to aquat H410: Very toxic to aquat H410: Very toxic to aquat GHS Precaution Phrase P273: Avoid release to th GHS Response Phrases P391: Collect spillage.), Category 1 hic), Category 1 Warning tic life. tic life with long lasting effects. es: ue environment.				
2.2	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements: GHS Signal Word: GHS Hazard Phrases: H400: Very toxic to aquat H410: Very toxic to aquat GHS Precaution Phrases P273: Avoid release to th GHS Response Phrases P391: Collect spillage. GHS Storage and Dispon Please refer to Section 7), Category 1 hic), Category 1 Warning tic life. tic life with long lasting effects. es: e environment. s: bsal Phrases: for Storage and Section 13 for Disposal information.	es and upper respiratory tract.			
2.2	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements: GHS Signal Word: GHS Hazard Phrases: H400: Very toxic to aquat H410: Very toxic to aquat H410: Very toxic to aquat GHS Precaution Phrase P273: Avoid release to th GHS Response Phrases P391: Collect spillage. GHS Storage and Dispon Please refer to Section 7 Adverse Human Health), Category 1 hic), Category 1 Warning tic life. tic life with long lasting effects. es: ue environment. s: psal Phrases: for Storage and Section 13 for Disposal information. Material may be irritating to the mucous membrane	es and upper respiratory tract. sorption.			
2.2	Aquatic Toxicity (Acute Aquatic Toxicity (Chron Label Elements: GHS Signal Word: GHS Hazard Phrases: H400: Very toxic to aquat H410: Very toxic to aquat H410: Very toxic to aquat GHS Precaution Phrase P273: Avoid release to th GHS Response Phrases P391: Collect spillage. GHS Storage and Dispon Please refer to Section 7 Adverse Human Health), Category 1 hic), Category 1 Warning tic life. tic life with long lasting effects. es: e environment. s: psal Phrases: for Storage and Section 13 for Disposal information. Material may be irritating to the mucous membrane May be harmful by inhalation, ingestion, or skin ab	es and upper respiratory tract. sorption.			



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	Section 3. Composition/Information on Ingredients							
CAS RTEC		Hazardous Comp REACH Registra	oonents (Chemical Name)/ tion No.	Concentration	EC No./ EC Index No.	GHS Classification		
12860 NA)7-22-7	Ospemifene		100.0 %	664-452-6 NA	Aquatic (A) 1: H400 Aquatic (C) 1: H410		
			Section 4. Fi	rst Aid Measu	ires			
4.1	Descrip	tion of First Aid						
	Measur	es:						
	In Case	of Inhalation:			respiration or giv	e oxygen by trained personnel.		
			Get immediate medical attent	ion.				
	In Case	of Skin Contact:	-			minutes. Remove contaminated		
			clothing. Get medical attentio		-			
	In Case	of Eye Contact:	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.					
	In Case	of Ingestion:	Wash out mouth with water p	rovided person is cor	nscious. Never gi	ve anything by mouth to an		
			unconscious person. Get med medical personnel.	dical attention. Do NO	OT induce vomitir	ng unless directed to do so by		
			Section 5. Fire	Fighting Mea	sures			
5.1	Suitable	e Extinguishing	Use alcohol-resistant foam, c	arbon dioxide, water	, or dry chemical	spray.		
	Media:		Use water spray to cool fire-e	exposed containers.				
		ble Extinguishing	A solid water stream may be	inefficient.				
	Media:							
5.2	Flamma Hazards	-	d No data available.					
			No data available.					
	Flash P	t:	No data.					
	Explosi	ve Limits:	LEL: No data.	UEL: No da	ta.			
	Autoigr	nition Pt:	No data.					
5.3	Fire Fig	hting Instructions	: As in any fire, wear self-conta	ained breathing appa	iratus pressure-de	emand (NIOSH approved or		
			equivalent), and full protectiv	e gear to prevent cor	ntact with skin an	d eyes.		
			Section 6. Acciden	tal Release N	/leasures			
6.1	Protect	ive Precautions,	Avoid raising and breathing	dust, and provide ade	equate ventilation).		
		-	0	· •	•	athing apparatus, or respirator,		
		ency Procedures:	and appropriate personal pro					
6.2	Enviror	mental	Take steps to avoid release	into the environment	, if safe to do so.			
	Precaut	ions:						
6.3	Methods and Material For Contain spill and collect, as appropriate.							
	Containment and CleaningTransfer to a chemical waste container for disposal in accordance with local regulations.							
	Up:							
			Section 7. Har	ndling and Sto	orage			
7.1	Precaut	tions To Be Taken	Avoid breathing dust/fume/ga	as/mist/vapours/spray	y.			
	in Hand	lling:	Avoid prolonged or repeated	exposure.				
7.2	Precaut	tions To Be Taken	Keep container tightly closed					
	in Stori	ng:	Store in accordance with info	rmation listed on the	product insert.			
						Multi-region format		



Multi-region format

	00011	on 8. Exposure Controls/Personal Protection
3.1	Exposure Parameters:	
8.2	Exposure Controls:	
8.2.1	Engineering Controls	Ise process enclosures, local exhaust ventilation, or other engineering controls to control airborn
	(Ventilation etc.):	evels below recommended exposure limits.
8.2.2	Personal protection equipn	nent:
	Eye Protection:	Safety glasses
	Protective Gloves: 0	Compatible chemical-resistant gloves
	Other Protective Clothing:L	ab coat
	Respiratory Equipment N	IIOSH approved respirator, as conditions warrant.
	(Specify Type):	
	Work/Hygienic/Maintenan	
		acilities storing or utilizing this material should be equipped with an eyewash and a safety showe
		Vash thoroughly after handling.
	Ν	lo data available.
	See	ction 9. Physical and Chemical Properties
9.1	Information on Basic Physic	al and Chemical Properties
	Physical States:	[]Gas []Liquid [X]Solid
	Appearance and Odor:	A crystalline solid
	pH:	No data.
	Melting Point:	No data.
	Boiling Point:	No data.
	Flash Pt:	No data.
	Evaporation Rate:	No data.
	Flammability (solid, gas):	No data available.
	Explosive Limits:	LEL: No data. UEL: No data.
	Vapor Pressure (vs. Air or r	nm No data.
	Hg):	
	Vapor Density (vs. Air = 1):	No data.
	Specific Gravity (Water = 1)	
	Solubility in Water:	No data.
	Solubility Notes:	~0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2); ~1.5 mg/ml in EtOH; ~20 mg/ml in DMSO & DMF;
	Octanol/Water Partition	No data.
	Coefficient:	
	Autoignition Pt:	No data.
	Decomposition Temperatur	e: No data.
	Viscosity:	No data.
9.2	Other Information	
	Percent Volatile:	No data.
	Molecular Formula & Weigh	t: C24H23ClO2 378.9



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			Section 10. Stability	and Reactiv	/ity			
10.1	Reactivit	ty:	No data available.					
10.2	Stability	:	Unstable [] Stable [X]					
10.3	Stability	Note(s):	Stable if stored in accordance with information listed on the product insert.					
	Polymer	ization:	Will occur [] Will not occur [X]					
10.4	Conditio	ns To Avoid:	No data available.					
10.5	Incompa	tibility - Materials	strong oxidizing agents					
	To Avoid	1:						
10.6	Hazardous Decomposition or		carbon dioxide					
			carbon monoxide					
	Byprodu	icts:	hydrogen chloride gas					
			Section 11. Toxicolog	gical Informa	tion			
11.1	Informat	ion on	The toxicological effects of this proc	luct have not been	thoroughly st	udied.		
	Toxicolo	gical Effects:						
CAS	#	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA	
1286	07-22-7	Ospemifene		n.a.	n.a.	n.a.	n.a.	
		+	Section 12. Ecologi	al Informati	 on			
10.4	Taviaitu				011			
12.1	Toxicity:		Avoid release into the environment.					
	-		Avoid release into the environment. Runoff from fire control or dilution w					
12.1 12.2	Persiste	nce and	Avoid release into the environment.					
12.2	Persiste Degrada	nce and bility:	Avoid release into the environment. Runoff from fire control or dilution w No data available.					
	Persister Degrada Bioaccu	nce and bility: mulative	Avoid release into the environment. Runoff from fire control or dilution w					
12.2 12.3	Persister Degrada Bioaccur Potentia	nce and bility: mulative I:	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available.					
12.2 12.3 12.4	Persister Degrada Bioaccur Potentia Mobility	nce and bility: mulative I: in Soil:	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available.					
12.2 12.3	Persister Degrada Bioaccur Potentia Mobility Results	nce and bility: mulative I: in Soil: of PBT and vPvB	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available.					
12.2 12.3 12.4 12.5	Persister Degrada Bioaccur Potentia Mobility Results assessm	nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available.					
12.2 12.3 12.4	Persister Degrada Bioaccur Potentia Mobility Results assessm	nce and bility: mulative I: in Soil: of PBT and vPvB	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available.	rater may cause po	llution.			
12.2 12.3 12.4 12.5	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad	nce and bility: mulative I: in Soil: of PBT and vPvB nent: Iverse effects:	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. Section 13. Disposal	rater may cause po	Ilution. ONS			
12.2 12.3 12.4 12.5	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad	nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, s	rater may cause po	llution. ONS gulations.			
12.2 12.3 12.4 12.5 12.6	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad	nce and bility: mulative I: in Soil: of PBT and vPvB nent: Iverse effects:	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. Section 13. Disposal	rater may cause po	llution. ONS gulations.			
12.2 12.3 12.4 12.5 12.6	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad	nce and bility: mulative I: in Soil: of PBT and vPvB nent: Iverse effects:	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, s Section 14. Transp	rater may cause po	llution. ONS gulations.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad Waste D	nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse effects: isposal Method:	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, s Section 14. Transp DOT):	rater may cause po	llution. ONS gulations.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad Waste D	nce and bility: mulative l: in Soil: of PBT and vPvB hent: lverse effects: isposal Method: RANSPORT (US I	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, s Section 14. Transp DOT):	rater may cause po	llution. ONS gulations.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad Waste D	nce and bility: mulative I: in Soil: of PBT and vPvB hent: iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class:	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, s Section 14. Transp DOT):	rater may cause po	llution. ONS gulations.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad Waste D LAND T OT Proper	nce and bility: mulative I: in Soil: of PBT and vPvB hent: iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class:	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, s Section 14. Transp DOT): : Not dangerous goods.	rater may cause po	llution. ONS gulations.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D U 14.1	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad Waste D LAND T OT Proper OT Hazaro	nce and bility: mulative l: in Soil: of PBT and vPvB hent: lverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: hber:	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, s Section 14. Transp DOT): : Not dangerous goods.	Consideration	Ilution. ONS gulations. ON	ne)		
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D U 14.1 A	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad Waste D LAND T OT Proper OT Hazaro	nce and bility: mulative l: in Soil: of PBT and vPvB hent: lverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: hber: RANSPORT (Euro hipping Name:	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, s Section 14. Transp DOT): : Not dangerous goods.	Consideration	Ilution. ONS gulations. ON	ne)		



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14.3 AIR TRANSPORT (ICAO/IATA): ICAO/IATA Shipping Name: Environmentally hazardous substances, solid, n.o.s. (Ospemifene) **UN Number:** 3077 Packing Group: Ш IATA Classification: Hazard Class: 9 - CLASS 9 9 Additional Transport Transport in accordance with local, state, and federal regulations. Information: When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity. Section 15. Regulatory Information EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists CAS # Hazardous Components (Chemical Name) S. 302 (EHS) S. 304 RQ S. 313 (TRI) 128607-22-7 Ospemifene No No No CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists 128607-22-7 CAA HAP, ODC: No; CWA NPDES: No; TSCA: No; CA Ospemifene PROP.65: No This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) **Regulatory Information** No.1272/2008. Statement: Section 16. Other Information Revision Date: 01/06/2018 Additional Information About No data available. This Product: Company Policy or Disclaimer: DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.