

		Section 1. Id	lentification of the Substar	nce/Mixture and of	the Company/U	ndertaking		
.1	Product		10655			5		
1.1	Product		Onalespib					
	Synony	ms:	·	l-1-piperazinyl)meth	yl]-2H-isoindol-2-y	ا][2,4-dihydroxy-5-(1-methyleth		
			phenyl]-methanone; AT1					
.2	Relevant identified uses of the substance or mixture and uses advised against:							
	Relevant identified uses: For research use only, not for human or veterinary use.							
1.3	Details of the Supplier of the Safety Data Sheet:							
	Company Name:		Cayman Chemical Comp 1180 E. Ellsworth Rd. Ann Arbor, MI 48108					
	Web s	ite address:	www.caymanchem.com					
	Inform	nation:	Cayman Chemical Comp	bany	+1 (73	4)971-3335		
1.4	Emerge	ency telephone num	ber:					
	Emerç	gency Contact:	CHEMTREC Within USA	and Canada:	+1 (80	00)424-9300		
			CHEMTREC Outside US	SA and Canada:	+1 (70	03)527-3887		
			Section 2. Ha	zards Identifi	cation			
2.1	Classifi	cation of the Substa	noo or Mixturo					
			ince of wixture.					
2.2		lements:						
2.2	Label E		None					
2.2	Label E GHS S	lements:						
2.2	Label E GHS S GHS I	lements: Signal Word: Hazard Phrases:		stance or mixture is	not classifiable ad	ccording to GHS.		
2.2	Label E GHS S GHS I Based GHS I	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases:	<b>None</b> rently available data this sub	stance or mixture is	not classifiable ad	ccording to GHS.		
2.2	Label E GHS S GHS I Based GHS I No ph	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply.	<b>None</b> rently available data this sub	stance or mixture is	not classifiable ad	ccording to GHS.		
2.2	Label E GHS S GHS I Based GHS I No ph GHS I	lements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases: rases apply. Response Phrases:	<b>None</b> rently available data this sub	stance or mixture is	not classifiable ad	ccording to GHS.		
2.2	Label E GHS S GHS I Based GHS I No ph GHS I No ph	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply.	None rently available data this sub	stance or mixture is	not classifiable ac	ccording to GHS.		
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	Label E GHS S GHS I Based GHS I No ph GHS S Please Advers	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 fo se Human Health	None rently available data this sub al Phrases: r Storage and Section 13 for Material may be irritating to t	r Disposal informatio he mucous membra	on. anes and upper res			
	Label E GHS S GHS I Based GHS I No ph GHS S Please Advers	lements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 fo the Human Health	None rently available data this sub al Phrases: r Storage and Section 13 for Material may be irritating to t May be harmful by inhalatior	r Disposal informatio he mucous membra n, ingestion, or skin a	on. anes and upper res absorption.			
	Label E GHS S GHS I Based GHS I No ph GHS S Please Advers	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 fo the Human Health	None rently available data this sub al Phrases: r Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp	r Disposal informatio he mucous membra n, ingestion, or skin a piratory system irrita	on. anes and upper res absorption. tion.			
	Label E GHS S GHS I Based GHS I No ph GHS S Please Advers	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 fo the Human Health	None rently available data this sub al Phrases: r Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp	r Disposal informatio he mucous membra n, ingestion, or skin a piratory system irrita e, the toxicological p	on. anes and upper res absorption. tion. properties have no	spiratory tract. t been thoroughly investigated.		
2.2 2.3 CAS RTE	Label E GHS S GHS I Based GHS I No ph GHS S Please Effects	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 fo the Human Health and Symptoms:	None rently available data this sub al Phrases: r Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge on 3. Composition nents (Chemical Name)/	r Disposal informatio he mucous membra n, ingestion, or skin a piratory system irrita e, the toxicological p	on. anes and upper res absorption. tion. properties have no	spiratory tract. t been thoroughly investigated.		

Multi-region format



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		Section 4. First Aid Measures
4.1	Description of First Aid	
	Measures:	
	In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
	In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
	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 provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.
		Section 5. Fire Fighting Measures
5.1	Suitable Extinguishing	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
	Media:	Use water spray to cool fire-exposed containers.
	Unsuitable Extinguishing Media:	A solid water stream may be inefficient.
5.2	Flammable Properties an	dNo data available.
	Hazards:	
		No data available.
	Flash Pt:	No data.
	Explosive Limits:	LEL: No data. UEL: No data.
	Autoignition Pt:	No data.
5.3	Fire Fighting Instructions	<b>s:</b> As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.
		Section 6. Accidental Release Measures
6.1	Protective Precautions,	Avoid raising and breathing dust, and provide adequate ventilation.
	Protective Equipment an	d As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator,
	Emergency Procedures:	and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).
6.2	Environmental	Take steps to avoid release into the environment, if safe to do so.
	Precautions:	
6.3		r Contain spill and collect, as appropriate.
		hgTransfer to a chemical waste container for disposal in accordance with local regulations.
	Up:	
		Section 7. Handling and Storage
7.1	Precautions To Be Taker	Avoid breathing dust/fume/gas/mist/vapours/spray.
	in Handling:	Avoid prolonged or repeated exposure.
7.2	Precautions To Be Taker	Keep container tightly closed.
	in Storing:	Store in accordance with information listed on the product insert.
	Sec	tion 8. Exposure Controls/Personal Protection
8.1	Exposure Parameters:	

Multi-region format



8.2	Exposure Controls:						
8.2.1	Engineering Controls	Jse process enclosures, local exhaust ventilation, or other engineering controls to control airborne					
	(Ventilation etc.):	levels below recommended exposure limits.					
8.2.2	Personal protection equipn	nent:					
	Eye Protection:	Safety glasses					
	Protective Gloves:	Compatible chemical-resistant gloves					
	Other Protective Clothing:Lab coat						
	Respiratory Equipment	H approved respirator, as conditions warrant.					
	(Specify Type):						
	Work/Hygienic/Maintenan Do not take internally.						
	ce Practices:	acilities storing or utilizing this material should be equipped with an eyewash and a safety shower.					
	V	Vash thoroughly after handling.					
	Ν	No data available.					
	Se	ction 9. Physical and Chemical Properties					
9.1	Information on Basic Physic	-					
	Physical States:	[]Gas []Liquid [X]Solid					
	Appearance and Odor:	A crystalline solid No data.					
	pH: Malting Daints						
	Melting Point:	No data. No data.					
	Boiling Point: Flash Pt:	No data.					
		No data.					
	Evaporation Rate:	No data available.					
	Flammability (solid, gas): Explosive Limits:	LEL: No data. UEL: No data.					
	Vapor Pressure (vs. Air or r						
	Hg):						
	Vapor Density (vs. Air = 1):	No data.					
	Specific Gravity (Water = 1) Solubility in Water:	No data.					
	Solubility Notes:	~0.16 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2); ~10 mg/ml in EtOH; ~20 mg/ml in					
	Solubility Notes.	DMSO; ~30 mg/ml in DMF;					
	Octanol/Water Partition	No data.					
	Coefficient:						
	Autoignition Pt:	No data.					
	Decomposition Temperatur						
	Viscosity:	No data.					
9.2	Other Information						
	Percent Volatile:	No data.					
	Molecular Formula & Weigh						



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					-			
10.1	Reactivity: No data available.							
10.2	Stability: Unstable [ ] Stable [ X ]							
10.3 Stability Note(s):		Note(s):	Stable if stored in accordance with information listed on the product insert.					
Polymerization: 10.4 Conditions To Avoid:		ization:	Will occur [ ] Will not occur [ X ]					
			No data available.					
10.5 Incompatibility - Materials s			strong oxidizing agents					
To Avoid:								
10.6	Hazardous Decomposition or Byproducts:		carbon dioxide carbon monoixde					
			nitrogen oxides					
					- (			
			Section 11. Toxicolog					
11.1	Informat		The toxicological effects of this prod	uct have not bee	n thoroughly st	udied.		
		ogical Effects:						
CAS		Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA	
9129	99-49-6			i				
		Onalespib		n.a.	n.a.	n.a.	n.a.	
		Onalespib	Section 12. Ecologic			n.a.	n.a.	
12.1	Toxicity		Section 12. Ecologic Avoid release into the environment.			n.a.	n.a.	
12.1			· · · · · · · · · · · · · · · · · · ·	al Informat	ion	n.a.	n.a.	
12.1 12.2		<u> </u>	Avoid release into the environment.	al Informat	ion	n.a.	n.a.	
	Toxicity	nce and	Avoid release into the environment. Runoff from fire control or dilution w	al Informat	ion	n.a.	n.a.	
	Toxicity Persiste Degrada Bioaccu	nce and bility: mulative	Avoid release into the environment. Runoff from fire control or dilution w	al Informat	ion	n.a.	n.a.	
12.2 12.3	Toxicity Persiste Degrada Bioaccu Potentia	nce and bility: mulative I:	Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available.	al Informat	ion	n.a.	n.a.	
12.2 12.3 12.4	Toxicity Persiste Degrada Bioaccu 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. No data available.	al Informat	ion	n.a.	n.a.	
12.2 12.3	Toxicity Persiste Degrada Bioaccu Potentia Mobility	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.	al Informat	ion	n.a.	n.a.	
12.2 12.3 12.4	Toxicity Persiste Degrada Bioaccu 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.	al Informat	ion	n.a.	n.a.	
12.2 12.3 12.4 12.5	Toxicity Persiste Degrada Bioaccu 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. No data available. No data available.	ater may cause p	ion	n.a.	n.a.	
12.2 12.3 12.4 12.5	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac	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.	al Informat	ion ollution.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac	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. <b>Section 13. Disposal</b>	ater may cause p Considerat	ion ollution. ions egulations.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac	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, st Section 14. Transpo	ater may cause p Considerat	ion ollution. ions egulations.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6 13.1 14.1	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ac 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, st Section 14. Transpo	ater may cause p Considerat	ion ollution. ions egulations.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6 13.1 14.1	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ac Waste D	nce and ibility: mulative l: in Soil: of PBT and vPvB nent: lverse effects: isposal Method: RANSPORT (US I r Shipping 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, st Section 14. Transpo	ater may cause p Considerat	ion ollution. ions egulations.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6 13.1 14.1	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac Waste D LAND T	nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse 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, st Section 14. Transpo	ater may cause p Considerat	ion ollution. ions egulations.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6 13.1 14.1	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac Waste D LAND T OT Prope OT Hazard	nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse 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, st Section 14. Transpo DOT): Not dangerous goods.	ater may cause p Considerat	ion ollution. ions egulations.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D( U) 14.1	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac Waste D LAND T OT Prope OT Hazard N/NA Nun LAND T	nce and ibility: mulative l: in Soil: of PBT and vPvB nent: lverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: nber:	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, st Section 14. Transpo DOT): Not dangerous goods.	ater may cause p Considerat	ion ollution. ions egulations.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6 13.1 14.1 Di UI 14.1 AI UI	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac Waste D LAND T OT Prope OT Hazard N/NA Nun LAND T	nce and ibility: mulative I: in Soil: of PBT and vPvB nent: Iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: nber: RANSPORT (Euro hipping Name: r:	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. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo DOT): Not dangerous goods.	ater may cause p Considerat	ion ollution. ions egulations.	n.a.	n.a.	

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Cayman	

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not dangerous goods.

Transport in accordance with local, state, and federal regulations.

Information:

**Additional Transport** 

# Section 15. Regulatory Information

CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
912999-49-6	Onalespib		No	No	No	
CAS #	Hazardous Components (Chemical Name)		Other US EPA or	State Lists	-	
912999-49-6	Onalespib		CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No			
Regulatory Information Statement:		This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.				
		Section 16. Ot	her Informatio	n		
Revision Date:		01/14/2017				
Additional Info	rmation About	No data available.				
This Product:						
This Product: Company Policy or Disclaimer:		DISCLAIMER: This information currently available to us. Howe express or implied, with respec use. Users should make their their particular purposes.	ver, we make no warr t to such information,	anty of merchanta and we assume n	bility or any other warranty o liability resulting from its	