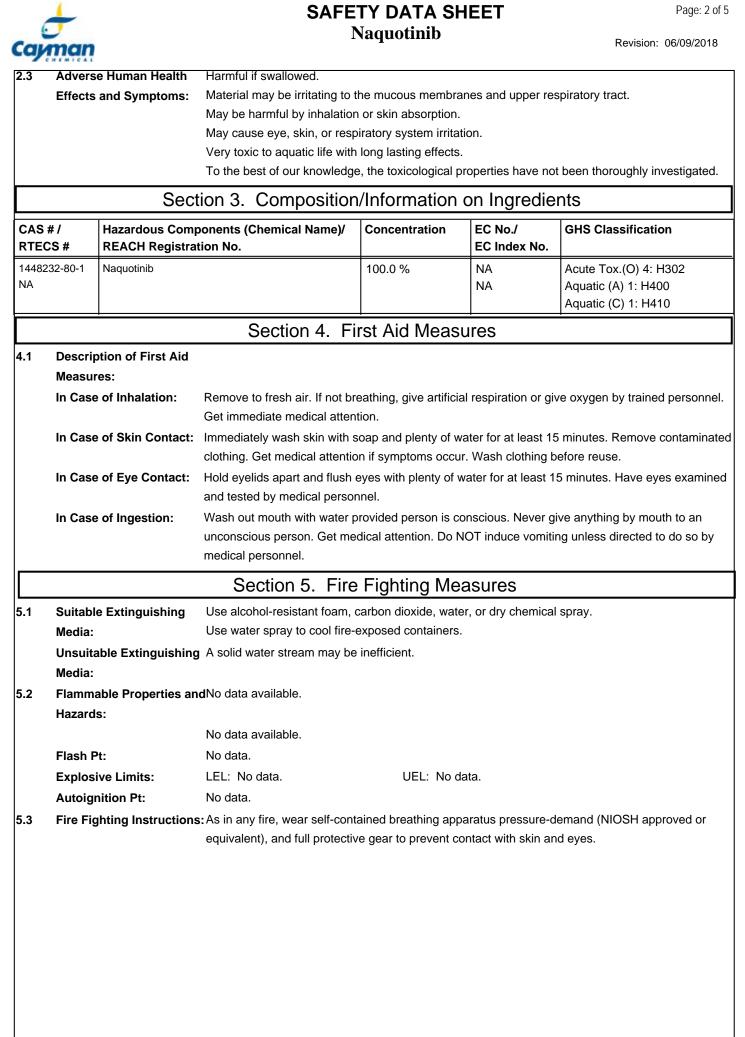


Page: 1 of 5

Revision:	06/09/2018
-----------	------------

		ing to Regulation (EC) No. 1907/2006 as amended by (E	,					
	Section 1. Ide	entification of the Substance/Mixture and of the	e Company/Undertaking					
.1	Product Code:	23498						
	Product Name:	Naquotinib						
	Synonyms:	6-ethyl-3-[[4-[4-(4-methyl-1-piperazinyl)-1-piperi						
	-yl)-3-pyrrolidinyl]oxy]-2-pyrazinecarboxamide; ASP8273;							
.2	Relevant identified uses of the substance or mixture and uses advised against:							
	Relevant identified uses:	For research use only, not for human or vetering	ary 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:	www.caymanchem.com						
	Information:	Cayman Chemical Company	+1 (734)971-3335					
.4	Emergency telephone numb							
	Emergency Contact:	CHEMTREC Within USA and Canada:	+1 (800)424-9300					
		CHEMTREC Outside USA and Canada:	+1 (703)527-3887					
		Section 2. Hazards Identifica	ation					
	Acute Toxicity: Oral, Categ Aquatic Toxicity (Acute), C							
.2		ategory 1						
.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic)	ategory 1						
.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic)	ategory 1						
.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic) Label Elements:	Category 1 , Category 1						
.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic) Label Elements: GHS Signal Word:	Category 1 , Category 1						
.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic) Label Elements: GHS Signal Word: GHS Hazard Phrases:	Category 1 , Category 1 Warning						
.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic) Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed.	ategory 1 , Category 1 Warning						
.2	Aquatic Toxicity (Acute), O Aquatic Toxicity (Chronic) Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H400: Very toxic to aquatic I	ategory 1 , Category 1 Warning						
.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic) Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H400: Very toxic to aquatic I H410: Very toxic to aquatic I	Actegory 1 , Category 1 Warning ife. ife with long lasting effects.						
.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic) Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H400: Very toxic to aquatic I H410: Very toxic to aquatic I GHS Precaution Phrases:	Ategory 1 , Category 1 Warning ife. ife with long lasting effects. ghly after handling.						
.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic) Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H400: Very toxic to aquatic I H410: Very toxic to aquatic I GHS Precaution Phrases: P264: Wash {hands} thoroug	Ategory 1 , Category 1 Warning ife. ife with long lasting effects. ghly after handling.						
.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic) Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H400: Very toxic to aquatic I H410: Very toxic to aquatic I H410: Very toxic to aquatic I GHS Precaution Phrases: P264: Wash {hands} thoroug P273: Avoid release to the e GHS Response Phrases:	Ategory 1 , Category 1 Warning ife. ife with long lasting effects. ghly after handling.	<i>r</i> ou feel unwell.					
.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic) Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H400: Very toxic to aquatic I H410: Very toxic to aquatic I H410: Very toxic to aquatic I GHS Precaution Phrases: P264: Wash {hands} thoroug P273: Avoid release to the e GHS Response Phrases:	Sategory 1 , Category 1 Warning ife. ife with long lasting effects. ghly after handling. nvironment.	<i>v</i> ou feel unwell.					
.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic) Label Elements: Constraints Constra	Sategory 1 , Category 1 Warning ife. ife with long lasting effects. ghly after handling. nvironment.	<i>r</i> ou feel unwell.					
.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic) Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H400: Very toxic to aquatic I H410: Very toxic to aquatic I H410: Very toxic to aquatic I GHS Precaution Phrases: P264: Wash {hands} thoroug P273: Avoid release to the e GHS Response Phrases: P301+312: IF SWALLOWED P330: Rinse mouth.	Sategory 1 , Category 1 Warning ife. ife with long lasting effects. ghly after handling. nvironment. D: Call a POISON CENTER or doctor/physician if y	/ou feel unwell.					
2.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic) Label Elements: Construction GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H400: Very toxic to aquatic I H410: Very toxic to aquatic I H410: Very toxic to aquatic I GHS Precaution Phrases: P264: Wash {hands} thoroug P273: Avoid release to the e GHS Response Phrases: P301+312: IF SWALLOWED P330: Rinse mouth. P391: Collect spillage. GHS Storage and Disposal	Sategory 1 , Category 1 Warning ife. ife with long lasting effects. ghly after handling. nvironment. 2: Call a POISON CENTER or doctor/physician if y Phrases:	<i>r</i> ou feel unwell.					
2.2	Aquatic Toxicity (Acute), C Aquatic Toxicity (Chronic) Label Elements: Construction GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H400: Very toxic to aquatic I H410: Very toxic to aquatic I H410: Very toxic to aquatic I GHS Precaution Phrases: P264: Wash {hands} thoroug P273: Avoid release to the e GHS Response Phrases: P301+312: IF SWALLOWED P330: Rinse mouth. P391: Collect spillage. GHS Storage and Disposal	Sategory 1 , Category 1 Warning ife. ife with long lasting effects. ghly after handling. nvironment. D: Call a POISON CENTER or doctor/physician if y	<i>r</i> ou feel unwell.					



Multi-region format



Revision: 06/09/2018

		Section 6. Accidental Release Measures					
6.1	Protective Precautions,	Avoid raising and breathing dust, and provide adequate ventilation.					
	Protective Equipment and	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	Methods and Material For Contain spill and collect, as appropriate.						
	Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations.						
	Up:						
		Section 7. Handling and Storage					
7.1	Precautions To Be Taken	Avoid breathing dust/fume/gas/mist/vapours/spray.					
	in Handling:	Avoid prolonged or repeated exposure.					
7.2	Precautions To Be Taken	Keep container tightly closed.					
	in Storing:	Store in accordance with information listed on the product insert.					
	Secti	on 8. Exposure Controls/Personal Protection					
8.1	Exposure Parameters:						
8.2	Exposure Controls:						
8.2.1	Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne					
	(Ventilation etc.):	evels below recommended exposure limits.					
8.2.2	Personal protection equipment:						
	Eye Protection:	Safety glasses					
	Protective Gloves:	Compatible chemical-resistant gloves					
	Other Protective Clothing:	Lab coat					
	Respiratory Equipment	quipment NIOSH approved respirator, as conditions warrant.					
	(Specify Type):						
	Work/Hygienic/Maintenan Do not take internally.						
ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash and a s							
	Wash thoroughly after handling.						
		No data available.					
	Se	ction 9. Physical and Chemical Properties					
9.1	Information on Basic Physi	cal 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	mm No data.					
	Hg):						
	Vapor Density (vs. Air = 1)	No data.					
		Multi-region format					



Revision:	06/09/2018

Page: 4 of 5

	Specific Gravity (Water = 1): Solubility in Water: Solubility Notes: Octanol/Water Partition Coefficient:		1):	No data.					
			-	No data.					
				~30 mg/ml in EtOH & DMF; ~2 mg/ml in DMSO;					
				No data.					
				No data.					
	Autoigni			No data.					
	Decompo	osition Temperat	ure:	No data.					
	Viscosity	<i>r</i> :		No data.					
9.2	Other Info	ormation							
	Percent	/olatile:		No data.					
	Molecula	r Formula & Weig	ght:	C30H42N8O3 562.7					
			S	ection 10. Stability and	d Reacti	vitv			
10.1	Reactivit	v:		ta available.		vity			
10.2	Stability:	-		ble [] Stable [X]					
10.2	Stability			if stored in accordance with inform	nation listed	on the product	insert		
10.5	-						insen.		
	Polymeri			cur [] Will not occur [X]					
10.4	Conditio	ns To Avoid:	No dat	ta available.					
10.5	Incompa	tibility - Materials	strong	acids					
	To Avoid	:	strong bases						
			strong	ng oxidizing agents					
			strong	ig reducing agents					
10.6	Hazardo	JS	No dat	o data available.					
	Decompo	osition or							
	Byprodu	cts:							
			Se	ection 11. Toxicologica	l Inform	ation			
11.1	Informati	on on		xicological effects of this product have not been thoroughly studied.					
		gical Effects:	THE LO			in thoroughly st	uuleu.		
CAS.		-	nonent	s (Chemical Name)	NTP	IARC	ACGIH	OSHA	
<u> </u>	CAS #Hazardous Comp1448232-80-1Naquotinib		ponent		n.a.	n.a.	n.a.	n.a.	
14402	232-00-1						11.d.	11.a.	
			S	Section 12. Ecological	Informat	tion			
12.1	Toxicity:		Avoid release into the environment.						
			Runoff	off from fire control or dilution water may cause pollution.					
12.2	Persister	nce and	No dat	ta available.					
	Degrada	bility:							
12.3	Bioaccur	nulative	No dat	ta available.					
	Potential								
12.4			No dat						
	•			data available.					
12.5	12.5 Results of PBT and vPvB No d assessment:		No dai	ta available.					
12.6	Other ad	verse effects:	No dat	ta available.					



Revision: 06/09/2018

		0 (1 40 5)		•			
		Section 13. Dispo					
13.1 Waste D	isposal Method:	Method: Dispose in accordance with local, state, and federal regulations.					
		Section 14. Trar	nsport Informa	tion			
14.1 LAND T	RANSPORT (US	DOT):					
DOT Prope	er Shipping Name	: Not dangerous goods.					
DOT Hazar	d Class:						
UN/NA Nur	nber:						
14.1 LAND T	RANSPORT (Eur	opean ADR/RID):					
ADR/RID S	hipping Name:	Environmentally hazardous substances, solid, n.o.s. (Naquotinib)					
UN Numbe	r:	3077	Packing Gro	ıp:	III		
Hazard Cla	ss:	9 - CLASS 9					
14.3 AIR TR	ANSPORT (ICAO/	IATA):					
ICAO/IATA	Shipping Name:	Environmentally hazardous	s substances, solid, n.	o.s. (Naquotinib)			
UN Numbe	r:	3077	Packing Gro	ıp:	III		
Hazard Cla	SS:	9 - CLASS 9	IATA Classifi	cation:	9		
Additional Tra	nsport	Transport in accordance with le	ocal, state, and federa	l 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 me		• •			
		Therefore packaging does not	have to be labeled as	Dangerous Goods/E	xcepted Quantity.		
		Section 15. Regu	latory Informa	tion			
EPA SARA (Sı	perfund Amendn	nents and Reauthorization Act	of 1986) Lists				
CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)		
1448232-80-1	Naquotinib	No No No					
CAS #	Hazardous Com	ponents (Chemical Name)	Other US EPA or	· State Lists	<u>+</u>		
1448232-80-1	Naquotinib	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA					
			PROP.65: No				
Regulatory Info	ormation	This SDS was prepared in acc	ordance with 29 CFR	1910.1200 and Regu	lation (EC)		
Statement:		No.1272/2008.					
		Section 16. Ot	her Informatio	n			
Revision Date:							
		06/09/2018					
Additional Info	rmation About	No data available.					
This Product:			Selection of the	under ein t	the base of the state		
Company Polic	y 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.					
		and particular purposes.					