

	C		(EC) No. 1272/2008					
	Section 1. Ide	entification of the Substance/Mixture and of th	ne Company/Undertaking					
.1	Product Code:	15569						
	Product Name:	Akt Inhibitor IV						
	Synonyms:	6-(2-benzothiazolyl)-1-ethyl-2-[2-(methylpheny	lamino)ethenyl]-3-phenyl-1H-benzimidazoliun					
		monoiodide;						
.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.							
.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	er:						
	Emergency Contact:	CHEMTREC Within USA and Canada:	+1 (800)424-9300					
		CHEMTREC Outside USA and Canada:	+1 (703)527-3887					
		Section 2. Hazards Identific	ation					
1	Classification of the Substar	aaa ar Mixtura						
•								
	Skin Corrosion/Irritation, C	Category 2						
	Serious Eye Damage/Eye Irritation, Category 2							
	Specific Target Organ Toxicity (single exposure), Category 3							
2	Label Elements:							
.2	Label Elements:							
.2	Label Elements:							
.2	Label Elements:							
2	Label Elements:							
2								
2	GHS Signal Word:	Warning						
2	GHS Signal Word: GHS Hazard Phrases:	Warning						
2	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation.	Warning						
2	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye ir	Warning rritation.						
.2	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye ir H335: May cause respiratory	Warning rritation.						
2	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye ir H335: May cause respiratory GHS Precaution Phrases:	Warning rritation. y irritation.						
2	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye ir H335: May cause respiratory GHS Precaution Phrases: P261: Avoid breathing {dust	Warning rritation. y irritation. /fume/gas/mist/vapors/spray}.						
2	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye ir H335: May cause respiratory GHS Precaution Phrases: P261: Avoid breathing {dustr P264: Wash {hands} thoroug	Warning rritation. y irritation. /fume/gas/mist/vapors/spray}. ghly after handling.	anj					
.2	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye ir H335: May cause respiratory GHS Precaution Phrases: P261: Avoid breathing {dustr P264: Wash {hands} thoroug P280: Wear {protective glove	Warning rritation. y irritation. /fume/gas/mist/vapors/spray}.	on}.					
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2	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye ir H335: May cause respiratory GHS Precaution Phrases: P261: Avoid breathing {dustr P264: Wash {hands} thoroug P280: Wear {protective glove GHS Response Phrases: P302+352: IF ON SKIN: Wa P304+340: IF INHALED: Re	Warning rritation. y irritation. /fume/gas/mist/vapors/spray}. ghly after handling. es/protective clothing/eye protection/face protecti sh with plenty of soap and water. move victim to fresh air and keep at rest in a pos	ition comfortable for breathing.					
2	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye ir H335: May cause respiratory GHS Precaution Phrases: P261: Avoid breathing {dust/ P264: Wash {hands} thoroug P280: Wear {protective glove GHS Response Phrases: P302+352: IF ON SKIN: Wa P304+340: IF INHALED: Re P305+351+338: IF IN EYES	Warning rritation. y irritation. /fume/gas/mist/vapors/spray}. ghly after handling. es/protective clothing/eye protection/face protecti sh with plenty of soap and water.	ition comfortable for breathing.					
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Cayman	

Hazardous Com REACH Registra -9 Akt Inhibitor IV scription of First Aid asures: Case of Inhalation:	Section 4. Fit Remove to fresh air. If not bre Get immediate medical attent Immediately wash skin with s clothing. Get medical attentio Hold eyelids apart and flush e and tested by medical person Wash out mouth with water p	Concentration 100.0 % rst Aid Meas eathing, give artific tion. coap and plenty of w on if symptoms occur eyes with plenty of nnel.	EC No./ EC Index No. 636-180-8 NA SUICES ial respiration or gi water for at least 19 ur. Wash clothing b water for at least 1 water for at least 1 conscious. Never g	GHS Classification Skin Corr. 2: H315 Eye Damage 2A: H319 STOT (SE) 3: H335 H336 ve oxygen by trained personnel. 5 minutes. Remove contaminate before reuse. 15 minutes. Have eyes examined give anything by mouth to an				
REACH Registration -9 Akt Inhibitor IV scription of First Aid asures: Case of Inhalation: Case of Skin Contact: Case of Eye Contact:	Remove to fresh air. If not bre Get immediate medical attentio Immediately wash skin with s clothing. Get medical attentio Hold eyelids apart and flush e and tested by medical person Wash out mouth with water p unconscious person. Get medical	100.0 % rst Aid Mease rst Aid Mease rst and plenty of work soap and plenty of work and fisymptoms occurs and plenty of more and plenty of m	EC Index No. 636-180-8 NA SUITES ial respiration or gi water for at least 18 ur. Wash clothing b water for at least 1 water for at least 1 conscious. Never g	Skin Corr. 2: H315 Eye Damage 2A: H319 STOT (SE) 3: H335 H336 ve oxygen by trained personnel. 5 minutes. Remove contaminate before reuse. 5 minutes. Have eyes examined ive anything by mouth to an				
scription of First Aid asures: Case of Inhalation: Case of Skin Contact: Case of Eye Contact:	Remove to fresh air. If not bre Get immediate medical attent Immediately wash skin with s clothing. Get medical attentio Hold eyelids apart and flush e and tested by medical person Wash out mouth with water p unconscious person. Get med	eathing, give artific tion. tionap and plenty of wo on if symptoms occu eyes with plenty of nnel.	NA SUITES ial respiration or gi water for at least 18 ur. Wash clothing b water for at least 1 conscious. Never g	Eye Damage 2A: H319 STOT (SE) 3: H335 H336 ve oxygen by trained personnel. 5 minutes. Remove contaminate before reuse. 5 minutes. Have eyes examined give anything by mouth to an				
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Case of Skin Contact: Case of Eye Contact:	Get immediate medical attent Immediately wash skin with s clothing. Get medical attentio Hold eyelids apart and flush e and tested by medical person Wash out mouth with water p unconscious person. Get med	tion. coap and plenty of work of symptoms occurs eyes with plenty of mol. provided person is c	water for at least 19 ur. Wash clothing b water for at least 1 conscious. Never g	5 minutes. Remove contaminate before reuse. 15 minutes. Have eyes examined give anything by mouth to an				
Case of Eye Contact:	Immediately wash skin with s clothing. Get medical attentio Hold eyelids apart and flush e and tested by medical person Wash out mouth with water p unconscious person. Get med	soap and plenty of weap and plenty of weap and plenty of a symptoms occurs with plenty of annel.	ur. Wash clothing b water for at least 1 conscious. Never g	before reuse. 5 minutes. Have eyes examined give anything by mouth to an				
Case of Eye Contact:	clothing. Get medical attentio Hold eyelids apart and flush e and tested by medical person Wash out mouth with water p unconscious person. Get med	on if symptoms occu eyes with plenty of nnel. provided person is c	ur. Wash clothing b water for at least 1 conscious. Never g	before reuse. 5 minutes. Have eyes examined give anything by mouth to an				
-	Hold eyelids apart and flush e and tested by medical person Wash out mouth with water p unconscious person. Get med	eyes with plenty of nnel. provided person is c	water for at least 1 conscious. Never g	5 minutes. Have eyes examined give anything by mouth to an				
Case of Ingestion:	Wash out mouth with water p unconscious person. Get me	provided person is a	-					
		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						
	Section 5. Fire	Fighting Me	asures					
itable Extinguishing		<u> </u>		lsprav				
dia:	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers.							
suitable Extinguishin dia:	a A solid water stream may be inefficient.							
mmable Properties a	ndNo data available.							
zards:								
	No data available.							
sh Pt:	No data.							
plosive Limits:	LEL: No data.	UEL: No (data.					
-								
e Fighting Instruction	s: 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.							
t	oignition Pt:	oignition Pt: No data. Fighting Instructions: As in any fire, wear self-cont	oignition Pt: No data. Fighting Instructions: As in any fire, wear self-contained breathing ap	oignition Pt: No data. Fighting Instructions: As in any fire, wear self-contained breathing apparatus pressure-o				



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		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		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.):	levels 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							
		NIOSH approved respirator, as conditions warrant.						
	(Specify Type):							
	Work/Hygienic/Maintenan							
		Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower.						
		Wash thoroughly after handling.						
		No data available.						
L		ction 9. Physical and Chemical Properties						
9.1	-	cal and Chemical Properties						
	Physical States:	[]Gas []Liquid [X]Solid						
	Appearance and Odor:	A crystalline solid						
	рН:	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. mm No data.						
	Vapor Pressure (vs. Air or Hg):							
	Vapor Density (vs. Air = 1):	No data.						
	· · · · · · · · · · · · · · · · · · ·							
		Multi-region forma						



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	Specific Gravity (Water = 1		1):	No data.							
	Solubility in Water:			No data.							
	Solubility Notes:			~30 mg/ml in EtOH, DMSO, & DMF;							
	Octanol/Water Partition			No data.							
	Coefficient:										
	Autoiani	tion Pt:		No data.							
	Autoignition Pt: Decomposition Temperature:			No data.							
	Viscosit	-		No data.							
9.2	Other Inf	-		No dala.							
9.2											
	Percent			No data.							
	Molecula	ar Formula & Weig	gnt:	C31H27N4S	•1 614.6)					
			S	ection 10	. Stabilit	y and	Reacti	vity			
10.1	Reactivi	ty:	No dat	a available.							
10.2	Stability	:	Unstat	ole [] Sta	able [X]						
10.3	Stability	Note(s):	Stable	if stored in ac	cordance with	n informat	ion listed o	on the product	insert.		
	Polymer	ization:	Will oc	cur[] W	ill not occur [X]					
10.4	Conditio	ns To Avoid:	No dat	a available.							
10.5	Incompa	tibility - Materials	strong	oxidizing ager	nts						
	To Avoid	d:	-								
10.6	Hazardo	us	carbon	dioxide							
		osition or		monoxide							
	Byprodu			Irogen iodide ogen oxides							
	Dyprode										
			-	fur oxides							
			Se	ection 11. Toxicological Information							
						<u> </u>					
11.1	Informat		The to:	kicological effe	ects of this pr	oduct hav	e not beer	n thoroughly st	udied.		
	loxicolo	gical Effects:									
CAS	CAS # Hazardous Comp			s (Chemical N	lame)		NTP	IARC	ACGIH	OSHA	
6812	681281-88-9 Akt Inhibitor IV						n.a.	n.a.	n.a.	n.a.	
	l			Section 12. Ecological Information							
					-		ιοπιαι				
12.1				id release into the environment. off from fire control or dilution water may cause pollution.							
100	Densiste										
12.2	Persiste		a available.								
	Degrada	-									
12.3		mulative	No dat	a available.							
	Potentia	l:									
12.4	Mobility in Soil: No da			o data available.							
12.5	Results of PBT and vPvB No d		No dat	a available.							
	assessm	nent:									
12.6	Other ad	lverse effects:	No dat	a available.							
1											



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ayman					Revision. 12/01/2017			
		Section 13. Dispos	sal Considera	ations				
13.1 Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.								
		Section 14. Trar	sport Information	ation				
14.1 LAND 1	RANSPORT (US	DOT):						
-	er Shipping Name	: Not dangerous goods.						
DOT Hazaı UN/NA Nu								
	RANSPORT (Eur	opean ADR/RID):						
	hipping Name:	Not dangerous goods.						
UN Numbe								
Hazard Cla		1474).						
	ANSPORT (ICAO/ Shipping Name:	Not dangerous goods.						
Additional Tra		Transport in accordance with lo	ocal, state, and fede	ral regulations.				
Information:	-			-				
		Section 15. Regu	latory Inform	ation				
EPA SARA (Sı	perfund Amendn	nents and Reauthorization Act	of 1986) Lists					
CAS #		ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)			
681281-88-9	Akt Inhibitor IV		No	No	No			
CAS #		ponents (Chemical Name) Other US EPA or State Lists						
681281-88-9	Akt Inhibitor IV	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No						
Regulatory Info	ormation	This SDS was prepared in according No.1272/2008.	ordance with 29 CFF	R 1910.1200 and R	egulation (EC)			
		Section 16. Ot	her Information	on				
Revision Date:		12/01/2017						
Additional Info This Product:	rmation About	No data available.						
Company Policy or Disclaimer:		DISCLAIMER: This information currently available to us. Howe express or implied, with respec use. Users should make their of their particular purposes.	ver, we make no wa t to such informatior	rranty of merchanta	ability or any other warranty, no liability resulting from its			