

Revision: 10/30/2016

	according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008						
	Section 1. Identification of the Substance/Mixture and of the Company/Undertaking						
.1	Product Code: 20654						
	Product Name:	Rhodamine 101 (inner salt)					
	Synonyms:	9-(2-carboxyphenyl)-2,3,6,7,12,13,16,17-octahy	ydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i				
		quinolizin-18-ium, inner salt; Rhodamine 640;					
.2	Relevant identified uses of the substance or mixture and uses advised against:						
	Relevant identified uses:	For research use only, not for human or veterin	ary use.				
1.3	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 Identifica					
	Classification of the Substan Skin Corrosion/Irritation, (Serious Eye Damage/Eye Specific Target Organ Tox Label Elements:	Category 2					
	Skin Corrosion/Irritation, (Serious Eye Damage/Eye Specific Target Organ Tox	Category 2 Irritation, Category 2					
	Skin Corrosion/Irritation, (Serious Eye Damage/Eye Specific Target Organ Tox	Category 2 Irritation, Category 2					
	Skin Corrosion/Irritation, G Serious Eye Damage/Eye Specific Target Organ Tox Label Elements:	Category 2 Irritation, Category 2 cicity (single exposure), Category 3					
	Skin Corrosion/Irritation, G Serious Eye Damage/Eye Specific Target Organ Tox Label Elements: GHS Signal Word:	Category 2 Irritation, Category 2 xicity (single exposure), Category 3 Warning					
	Skin Corrosion/Irritation, G Serious Eye Damage/Eye Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases:	Category 2 Irritation, Category 2 xicity (single exposure), Category 3 Warning					
	Skin Corrosion/Irritation, G Serious Eye Damage/Eye Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye i H335: May cause respirator	Category 2 Irritation, Category 2 xicity (single exposure), Category 3 Warning rritation.					
	Skin Corrosion/Irritation, G Serious Eye Damage/Eye I Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye i H335: May cause respirator GHS Precaution Phrases:	Category 2 Irritation, Category 2 xicity (single exposure), Category 3 Warning rritation. y irritation.					
	Skin Corrosion/Irritation, G Serious Eye Damage/Eye Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye i H335: May cause respirator GHS Precaution Phrases: P261: Avoid breathing {dust	Category 2 Irritation, Category 2 Aricity (single exposure), Category 3 Warning rritation. y irritation. y irritation.					
	Skin Corrosion/Irritation, G Serious Eye Damage/Eye Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye i H335: May cause respirator GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorous	Category 2 Irritation, Category 2 Aicity (single exposure), Category 3 Warning Warning rritation. y irritation. y irritation.					
	Skin Corrosion/Irritation, G Serious Eye Damage/Eye Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye i H335: May cause respirator GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thoroug P280: Wear {protective glov	Category 2 Irritation, Category 2 Aricity (single exposure), Category 3 Warning rritation. y irritation. y irritation.	pn}.				
	Skin Corrosion/Irritation, G Serious Eye Damage/Eye Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye i H335: May cause respirator GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorous P280: Wear {protective glow GHS Response Phrases:	Category 2 Irritation, Category 2 Aicity (single exposure), Category 3 Warning	pn}.				
	Skin Corrosion/Irritation, G Serious Eye Damage/Eye Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye i H335: May cause respirator GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorous P280: Wear {protective glov GHS Response Phrases: P302+352: IF ON SKIN: Wa	Category 2 Irritation, Category 2 Aticity (single exposure), Category 3 Warning rritation. y irritation. y irritation. /fume/gas/mist/vapors/spray}. ghly after handling. es/protective clothing/eye protection/face protection ash with plenty of soap and water.					
	Skin Corrosion/Irritation, G Serious Eye Damage/Eye I Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye i H335: May cause respirator GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thoroug P280: Wear {protective glow GHS Response Phrases: P302+352: IF ON SKIN: Wa P304+340: IF INHALED: Res	Category 2 Irritation, Category 2 Aicity (single exposure), Category 3 Warning	tion comfortable for breathing.				
	Skin Corrosion/Irritation, G Serious Eye Damage/Eye I Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye i H335: May cause respirator GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thoroug P280: Wear {protective glow GHS Response Phrases: P302+352: IF ON SKIN: Wa P304+340: IF INHALED: Res	Category 2 Irritation, Category 2 Aticity (single exposure), Category 3 Warning rritation. y irritation. y irritation. /fume/gas/mist/vapors/spray}. ghly after handling. es/protective clothing/eye protection/face protection ash with plenty of soap and water.	tion comfortable for breathing.				
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2.2	Skin Corrosion/Irritation, G Serious Eye Damage/Eye Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye i H335: May cause respirator GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorous P280: Wear {protective glow GHS Response Phrases: P302+352: IF ON SKIN: Wa P304+340: IF INHALED: Re P305+351+338: IF IN EYES to do. Continue rinsing. P312: Call a POISON CENT	Category 2 Irritation, Category 2 Aticity (single exposure), Category 3 Warning Warning	tion comfortable for breathing.				
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Hazardous Com REACH Registra Rhodamine 101 (in iption of First Aid ires: ae of Inhalation:	ner salt) Section 4. Fir Remove to fresh air. If not bre	Concentration	EC No./ EC Index No. NA NA	NtS GHS Classification Skin Corr. 2: H315 Eye Damage 2A: H319 STOT (SE) 3: H335 H336		
REACH Registra Rhodamine 101 (in iption of First Aid ires: ae of Inhalation:	ation No. ner salt) Section 4. Fin Remove to fresh air. If not bre	100.0 %	EC Index No. NA NA	Skin Corr. 2: H315 Eye Damage 2A: H319		
iption of First Aid Ires: Se of Inhalation:	Section 4. Fir	rst Aid Measu	NA	Eye Damage 2A: H319		
ires: e of Inhalation:	Remove to fresh air. If not bre		ures			
ires: e of Inhalation:		acthing give artificia				
e of Skin Contact: e of Eye Contact: e of Ingestion:	clothing. Get medical attention Hold eyelids apart and flush e and tested by medical person Wash out mouth with water pe	tion. oap and plenty of wa n if symptoms occur eyes with plenty of w nnel. rovided person is co	ater for at least 15 . Wash clothing b rater for at least 1 nscious. Never gi	5 minutes. Have eyes examined		
	Section 5. Fire	Fighting Mea	asures			
:	Use alcohol-resistant foam, c Use water spray to cool fire-e g A solid water stream may be ndNo data available.	exposed containers.	r, or dry chemical	spray.		
Hazards:						
Pt: sive Limits: gnition Pt: ghting Instruction	-	ained breathing appa	aratus pressure-de			
s	ive Limits: nition Pt:	ive Limits: LEL: No data. nition Pt: No data. ghting Instructions: As in any fire, wear self-contained.	ive Limits:LEL: No data.UEL: No data.nition Pt:No data.ghting Instructions: As in any fire, wear self-contained breathing apparent	ive Limits: LEL: No data. UEL: No data.		



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	Ś	Section 6. Accidental Release Measures					
6.1	Protective Precautions,	Avoid raising and breathing dust, and provide adequate ventilation. 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.					
0.2	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		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 equip						
	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.					
—							
		ction 9. Physical and Chemical Properties					
9.1		cal and Chemical Properties					
	Physical States:	[]Gas []Liquid [X]Solid					
	Appearance and Odor:	A crystalline solid No data.					
	pH: Molting Doint:						
	Melting Point:	No data. No data.					
	Boiling Point: 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						
	Hg):						
	Vapor Density (vs. Air = 1)	No data.					
		Multi-region format					



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	Specific	Gravity (Water =	1): No data.					
	Solubility	y in Water:	No data.					
	Solubility	y Notes:	~0.1 mg/ml in EtOH;					
	Octanol/	Water Partition	No data.					
	Coefficie	ent:						
	Autoigni	tion Pt:	No data.					
	-	osition Temperat	ure: No data.					
	Viscosity	-	No data.					
9.2	Other Info							
	Percent '		No data.					
		r Formula & Wei		3				
	Molecula				Deed	::		
	D		Section 10. Stabili	ty and	React	IVITY		
10.1	Reactivit	-	No data available.					
10.2	Stability:		Unstable [] Stable [X]					
10.3	Stability		Stable if stored in accordance wi		tion listed	on the product	insert.	
	Polymeri	zation:	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	l:						
10.6	Hazardo	us	carbon dioxide					
	Decomp	osition or	carbon monoxide					
	Byprodu	cts:	hydrogen chloride gas					
			nitrogen oxides					
			Section 11. Toxicol	ogical	Inform	ation		
11.1	Informat	ion on	The toxicological effects of this p	oroduct hav	ve not bee	en thoroughly st	udied.	
	Toxicolo	gical Effects:						
CAS	#	Hazardous Com	ponents (Chemical Name)		NTP	IARC	ACGIH	OSHA
1164	50-56-7	Rhodamine 101 (inner salt)		n.a.	n.a.	n.a.	n.a.
<u> </u>								
			Section 12. Ecolo	-	norma	lion		
12.1	Toxicity:		Avoid release into the environme					
			Runoff from fire control or dilution	n water ma	ay cause p	poliution.		
12.2	Persister		No data available.					
	Degrada	bility:						
12.3	Bioaccu	nulative	No data available.					
	Potentia	:						
12.4	Mobility	in Soil:	No data available.					
12.5	Results of	of PBT and vPvB	No data available.					
	assessm	ent:						
12.6	Other ad	verse effects:	No data available.					

Multi-region format



		Section 13. Dispos	al Considerat	ions			
13.1 Waste D)isposal Method:	•					
		Section 14. Trans	sport Informat	ion			
14.1 LAND 1	RANSPORT (US	DOT):					
DOT Prope DOT Hazar	er Shipping Name rd Class:	Not dangerous goods.					
UN/NA Nui	mber:						
	ANSPORT (European ADR/RID):						
	hipping Name:	Not dangerous goods.					
UN Numbe Hazard Cla							
	ANSPORT (ICAO/	IATA).					
	Shipping Name:	Not dangerous goods.					
Additional Tra		Transport in accordance with lo	cal state and federal	l regulations			
Information:	naport			regulations.			
		Section 15. Regul	atory Informat	tion			
		nents and Reauthorization Act	•				
CAS #	-	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)		
116450-56-7	Rhodamine 101 (· · · · · ·	No	No	No		
CAS #	Hazardous Com	ponents (Chemical Name) Other US EPA or State Lists					
CAS # Hazardous Con 116450-56-7 Rhodamine 101			CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No				
Regulatory Info	, prmation	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.					
Statement:							
		Section 16. Oth	ner Information	า			
Revision Date:		10/30/2016					
Additional Info	rmation About	No data available.					
This Product:							
Company Policy or Disclaimer:		DISCLAIMER: This information currently available to us. Howev express or implied, with respect use. Users should make their o their particular purposes.	er, we make no warra to such information, a	anty of merchantabilit and we assume no lia	y or any other warrant		