

Revision: 09/17/2019 Supersedes Revision: 02/09/2017

	accordir	ng to Regulation (EC) No. 1907/2006 as amended by (EC) No. 2015/8	30 and US OSHA HCS 2015				
	Section 1.	Identification of the Substance/Mixture and of t	he Company/Undertaking				
.1	Product Code:	700004					
	Product Name:	Fluorometric Developer Reagent					
.2	Relevant identified uses o	f the substance or mixture and uses advised ag	gainst:				
	Relevant identified uses	For research use only, not for human or veter	inary 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 nur						
	Emergency Contact:	CHEMTREC Within USA and Canada:	+1 (800)424-9300				
		CHEMTREC Outside USA and Canada:	+1 (703)527-3887				
		Section 2. Hazards Identific	cation				
.1	Classification of the Subs	tance or Mixture:					
	Skin Corrosion/Irritation	Skin Corrosion/Irritation, Category 2					
	Serious Eye Damage/Eye Irritation, Category 2						
	Serious Eye Damage/Ey						
		e Irritation, Category 2					
2.2							
.2	Specific Target Organ T Label Elements:	re Irritation, Category 2 oxicity (single exposure), Category 3					
2	Specific Target Organ T Label Elements: GHS Signal Word:	e Irritation, Category 2					
2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Hazard Phrases:	re Irritation, Category 2 oxicity (single exposure), Category 3 Warning					
2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation	e Irritation, Category 2 oxicity (single exposure), Category 3 Warning					
2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Hazard Phrases:	e Irritation, Category 2 oxicity (single exposure), Category 3 Warning on. e irritation.					
.2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye	e Irritation, Category 2 oxicity (single exposure), Category 3 Warning on. e irritation. tory irritation.					
.2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious even H335: May cause respiration	e Irritation, Category 2 oxicity (single exposure), Category 3 Warning on. e irritation. tory irritation.					
.2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious even H335: May cause respiration	warning Warning Dn. e irritation. tory irritation. s: ust/fume/gas/mist/vapours/spray}.					
.2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye H335: May cause respirat GHS Precaution Phrases P261: Avoid breathing {du P264: Wash {hands} thore	warning Warning Dn. e irritation. tory irritation. s: ust/fume/gas/mist/vapours/spray}.	tion}.				
.2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye H335: May cause respirat GHS Precaution Phrases P261: Avoid breathing {du P264: Wash {hands} thore	warning Warning on. e irritation. tory irritation. s: ust/fume/gas/mist/vapours/spray}. bughly after handling. oves/protective clothing/eye protection/face protect	tion}.				
.2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye H335: May cause respirat GHS Precaution Phrases P261: Avoid breathing {du P264: Wash {hands} thoro P280: Wear {protective gl GHS Response Phrases	warning Warning on. e irritation. tory irritation. s: ust/fume/gas/mist/vapours/spray}. bughly after handling. oves/protective clothing/eye protection/face protect	tion}.				
.2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye H335: May cause respirate GHS Precaution Phrases P261: Avoid breathing {du P264: Wash {hands} thorow P280: Wear {protective gl GHS Response Phrases P302+352: IF ON SKIN: W P304+340: IF INHALED:	warning Warning Warning on. e irritation. tory irritation. scry irritation. style ust/fume/gas/mist/vapours/spray}. oughly after handling. oves/protective clothing/eye protection/face protect wash with plenty of soap and water. Remove victim to fresh air and keep at rest in a pos	sition comfortable for breathing.				
.2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye H335: May cause respirat GHS Precaution Phrases P261: Avoid breathing {du P264: Wash {hands} thoro P280: Wear {protective gl GHS Response Phrases P302+352: IF ON SKIN: W P304+340: IF INHALED: P305+351+338: IF IN EYE	warning Warning on. e irritation. tory irritation. s: ust/fume/gas/mist/vapours/spray}. pughly after handling. oves/protective clothing/eye protection/face protection wash with plenty of soap and water.	sition comfortable for breathing.				
.2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious even H335: May cause respirate GHS Precaution Phrases P261: Avoid breathing {du P264: Wash {hands} thorow P280: Wear {protective gl GHS Response Phrases P302+352: IF ON SKIN: W P304+340: IF INHALED: P305+351+338: IF IN EYE	e Irritation, Category 2 oxicity (single exposure), Category 3 Warning on. e irritation. tory irritation. s: ust/fume/gas/mist/vapours/spray}. oughly after handling. oves/protective clothing/eye protection/face protecter Wash with plenty of soap and water. Remove victim to fresh air and keep at rest in a pos ES: Rinse cautiously with water for several minutes	sition comfortable for breathing.				
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.2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eyon H335: May cause respirate GHS Precaution Phrases P261: Avoid breathing {du P264: Wash {hands} thorow P280: Wear {protective gl GHS Response Phrases P302+352: IF ON SKIN: W P304+340: IF INHALED: I P305+351+338: IF IN EYIN to do. Continue rinsing. P312: Call a POISON CE P332+313: If skin irritation	warning Warning on. e irritation. tory irritation. s: ust/fume/gas/mist/vapours/spray}. bughly after handling. oves/protective clothing/eye protection/face protection: Wash with plenty of soap and water. Remove victim to fresh air and keep at rest in a pos ES: Rinse cautiously with water for several minutes NTER or doctor/physician if you feel unwell. h occurs, get medical advice/attention.	sition comfortable for breathing.				
.2	Specific Target Organ T Label Elements: GHS Signal Word: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious even H335: May cause respirate GHS Precaution Phrases P261: Avoid breathing {du P264: Wash {hands} thorow P280: Wear {protective gl GHS Response Phrases P302+352: IF ON SKIN: W P304+340: IF INHALED: P305+351+338: IF IN EYN to do. Continue rinsing. P312: Call a POISON CE P332+313: If skin irritation P337+313: If eye irritation	warning Warning on. e irritation. tory irritation. tory irritation. s: ust/fume/gas/mist/vapours/spray}. oughly after handling. oves/protective clothing/eye protection/face protection: Wash with plenty of soap and water. Remove victim to fresh air and keep at rest in a pose ES: Rinse cautiously with water for several minutes NTER or doctor/physician if you feel unwell. h occurs, get medical advice/attention.	sition comfortable for breathing.				
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	e Human Health and Symptoms:	May be harmful by inhalation May cause respiratory syster	he mucous membr , ingestion, or skin n irritation.	absorption.	
	Sec	tion 3. Composition	/Information	on Ingredie	nts
-	-		Concentration	EC No./ EC Index No.	GHS Classification
	(Trade Secret)NA		100.0 %	NA NA	Skin Corr. 2: H315 Eye Damage 2A: H319 STOT (SE) 3: H335 H336
		Section 4. Fi	rst Aid Meas	sures	
Measur	es:			ial respiration or gi	ve oxygen by trained personnel.
In Case	of Skin Contact:	•			
In Case	of Eye Contact:			water for at least 1	5 minutes. Have eyes examined
In Case	e of Ingestion:		-	-	
		Section 5. Fire	Fighting Me	easures	
Media: Unsuita Media:	able Extinguishing	Use water spray to cool fire-o g A solid water stream may be	exposed containers	-	l spray.
	-	ndNo data available.			
Explosi Autoigi	ive Limits: nition Pt:	No data available. No data. LEL: No data. No data.			
Fire Fig	yhting Instruction				
	Effects # / CS # Descrip Measur In Case In Ca	Effects and Symptoms: Sec Sec #/ CS # Hazardous Com REACH Registra (Trade Secret)NA Description of First Aid Measures: In Case of Inhalation: In Case of Skin Contact: In Case of Skin Contact: In Case of Eye Contact: In Case of Ingestion: Suitable Extinguishing Media: Unsuitable Extinguishing Media: Flammable Properties ar Hazards: Flash Pt: Explosive Limits: Autoignition Pt:	Effects and Symptoms: Causes skin irritation. Material may be irritating to the May be harmful by inhalation May cause respiratory syster To the best of our knowledge Section 3. Composition #/ Hazardous Components (Chemical Name)/ REACH Registration No. (Trade Secret)NA (Trade Secret)NA Description of First Aid Measures: In Case of Inhalation: Remove to fresh air. If not bre Get immediate medical attention In Case of Skin Contact: In Case of Skin Contact: Immediately wash skin with s clothing. Get medical attention In Case of Ingestion: Wash out mouth with water p unconscious person. Get medical person endical person In Case of Ingestion: Use alcohol-resistant foam, of Use water spray to cool fire-ed Unsuitable Extinguishing Media: Use alcohol-resistant foam, of Use water spray to cool fire-ed Unsuitable Extinguishing A solid water stream may be Media: No data available. Flash Pt: No data. Explosive Limits: LEL: No data. Autoignition Pt: No data. Fire Fighting Instructions: As in any fire, wear self-contal	Effects and Symptoms: Causes skin irritation. Material may be irritating to the mucous membro May be harmful by inhalation, ingestion, or skin May cause respiratory system irritation. To the best of our knowledge, the toxicological Section 3. Composition/Information # / CS # Hazardous Components (Chemical Name)/ REACH Registration No. Concentration (Trade Secret)NA 100.0 % Description of First Aid Measures: 100.0 % In Case of Inhalation: Remove to fresh air. If not breathing, give artific Get immediate medical attention. In Case of Skin Contact: Immediately wash skin with soap and plenty of clothing. Get medical attention if symptoms occ In Case of Ingestion: Wash out mouth with water provided person is of unconscious person. Get medical attention. Do medical personnel. In Case of Ingestion: Use alcohol-resistant foam, carbon dioxide, wat Use water spray to cool fire-exposed containeers Suitable Extinguishing Media: Use alcohol-resistant foam, carbon dioxide, wat Use water spray to cool fire-exposed containeers Media: No data available. Flash Pt: No data. No data. Explosive Limits: LEL: No data. UEL: No Autoignition Pt: No data. Fire Fighting Instructions: As in any fire, wear self-contained breathing ap	Effects and Symptoms: Causes skin irritation. Material may be irritating to the mucous membranes and upper re May be harmful by inhalation, ingestion, or skin absorption. May cause respiratory system irritation. To the best of our knowledge, the toxicological properties have not Section 3. Composition/Information on Ingredies # / CS # Hazardous Components (Chemical Name)/ REACH Registration No. Concentration EC No./ EC Index No. # / CS # Hazardous Components (Chemical Name)/ REACH Registration No. Concentration EC No./ EC Index No. # / CS # Hazardous Components (Chemical Name)/ REACH Registration No. Concentration EC No./ EC Index No. # / CS # Hazardous Components (Chemical Name)/ REACH Registration No. Concentration Na Max 100.0 % NA NA In Case of First Aid Measures: Section 4. First Aid Measures In Case of Skin Contact: Immediately wash skin with soap and plenty of water for at least 12 clothing. Get medical attention if symptoms occur. Wash clothing to and tested by medical personnel. In Case of Ingestion: Wash out mouth with water provided person is conscious. Never g unconscious person. Get medical attention. Do NOT induce vomiti medical personnel. Suitable Extinguishing Media: Use alcohol-resistant foam, carbon dioxide, water, or dry chemica Use water spray to cool fire-exposed containers. Unsuitable Extinguishing Media: A solid water stream may b



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	ç	Section 6. Accidental Release Measures
6.1		Avoid raising and breathing dust, and provide adequate ventilation.
		As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator,
	3,	and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).
6.2		Take steps to avoid release into the environment, if safe to do so.
	Precautions:	
6.3		Contain spill and collect, as appropriate.
	-	Transfer to a chemical waste container for disposal in accordance with local regulations.
	Up:	
		Section 7. Handling and Storage
7.1		Avoid breathing dust/fume/gas/mist/vapours/spray.
	in Handling:	Avoid prolonged or repeated exposure.
7.2	Precautions To Be Taken	
	in Storing:	Store in accordance with information listed on the product insert.
	Section	on 8. Exposure Controls/Personal Protection
8.1	Exposure Parameters:	
8.2	Exposure Controls:	
8.2.1	Engineering Controls	Jse process enclosures, local exhaust ventilation, or other engineering controls to control airborne
	(Ventilation etc.):	evels below recommended exposure limits.
8.2.2	Personal protection equipr	nent:
	Eye Protection:	Safety glasses
	Protective Gloves:	Compatible chemical-resistant gloves
	Other Protective Clothing:	Lab coat
	Respiratory Equipment	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 safety shower.
	١	Nash thoroughly after handling.
	1	No data available.
	Se	ction 9. Physical and Chemical Properties
9.1	Information on Basic Physic	cal and Chemical Properties
	Physical States:	[]Gas []Liquid [X]Solid
	Appearance and Odor:	A lyophilized powder
	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

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	Specific Gravity (Water =	1): No data.				
	Solubility in Water:	No data.				
	Octanol/Water Partition	No data.				
	Coefficient:					
	Autoignition Pt:	No data.				
	Decomposition Temperate	ure: No data.				
	Viscosity:	No data.				
9.2	Other Information					
	Percent Volatile:	No data.				
		Section 10. Stability a	and Reactiv	ity		
10.1	Reactivity:	No data available.				
10.2	Stability:	Unstable [] Stable [X]				
10.3	Stability Note(s):	Stable if stored in accordance with inf	ormation listed or	n the product i	insert.	
	Polymerization:	Will occur [] Will not occur [X]				
10.4	Conditions To Avoid:	No data available.				
10.5	Incompatibility - Materials	strong oxidizing agents				
	To Avoid:					
10.6	Hazardous	carbon dioxide				
	Decomposition or	carbon monoxides				
	Byproducts:	nitrogen oxides				
		sodium oxides				
		Sould in Oxides				
		Section 11. Toxicologi	cal Informa	tion		
11.1	Information on				udied.	
11.1	Information on Toxicological Effects:	Section 11. Toxicologi			udied.	
11.1 CAS ;	Toxicological Effects:	Section 11. Toxicologi			udied.	OSHA
	Toxicological Effects:	Section 11. Toxicologi The toxicological effects of this produ	ct have not been	thoroughly stu		OSHA n.a.
	Toxicological Effects: # Hazardous Com	Section 11. Toxicologi The toxicological effects of this produ	t have not been NTP n.a.	thoroughly stu IARC n.a.	ACGIH	_
CAS	Toxicological Effects: # Hazardous Com	Section 11. Toxicologic The toxicological effects of this produ ponents (Chemical Name)	t have not been NTP n.a.	thoroughly stu IARC n.a.	ACGIH	
	Toxicological Effects: # Hazardous Composition NA (Trade Secret)	Section 11. Toxicologic The toxicological effects of this produ ponents (Chemical Name) Section 12. Ecologica	n.a.	thoroughly stu IARC n.a. DN	ACGIH	_
CAS ;	Toxicological Effects: # Hazardous Composition NA (Trade Secret)	Section 11. Toxicologic The toxicological effects of this produ ponents (Chemical Name) Section 12. Ecologica Avoid release into the environment.	n.a.	thoroughly stu IARC n.a. DN	ACGIH	_
CAS	Toxicological Effects: # Hazardous Complexity NA (Trade Secret) Toxicity:	Section 11. Toxicologia The toxicological effects of this produ ponents (Chemical Name) Section 12. Ecologica Avoid release into the environment. Runoff from fire control or dilution wat	n.a.	thoroughly stu IARC n.a. DN	ACGIH	_
CAS : 12.1 12.2	Toxicological Effects: # Hazardous Comp NA (Trade Secret) Toxicity: Persistence and	Section 11. Toxicologia The toxicological effects of this produ ponents (Chemical Name) Section 12. Ecologica Avoid release into the environment. Runoff from fire control or dilution wat	n.a.	thoroughly stu IARC n.a. DN	ACGIH	
CAS : 12.1 12.2	Toxicological Effects: # Hazardous Complexity NA (Trade Secret) Toxicity: Persistence and Degradability:	Section 11. Toxicologia The toxicological effects of this produ ponents (Chemical Name) Section 12. Ecologica Avoid release into the environment. Runoff from fire control or dilution wat No data available.	n.a.	thoroughly stu IARC n.a. DN	ACGIH	_
CAS ; 12.1 12.2 12.3	Toxicological Effects: # Hazardous Complexity NA (Trade Secret) Toxicity: Image: Complexity of the secret of the secre	Section 11. Toxicologia The toxicological effects of this produ ponents (Chemical Name) Section 12. Ecologica Avoid release into the environment. Runoff from fire control or dilution wat No data available.	n.a.	thoroughly stu IARC n.a. DN	ACGIH	_
CAS ; 12.1 12.2 12.3 12.4	Toxicological Effects: # Hazardous Complexity NA (Trade Secret) Toxicity: Image: Complexity of the secret	Section 11. Toxicologia The toxicological effects of this produ ponents (Chemical Name) Section 12. Ecologica Avoid release into the environment. Runoff from fire control or dilution wat No data available. No data available.	n.a.	thoroughly stu IARC n.a. DN	ACGIH	_
CAS ; 12.1 12.2 12.3 12.4	Toxicological Effects: # Hazardous Comparised Comparised Comparised Comparised Comparison Toxicity: Image: Comparised Comparised Comparised Comparised Comparison Persistence and Degradability: Display comparison Bioaccumulative Potential: Mobility in Soil:	Section 11. Toxicologia The toxicological effects of this produ ponents (Chemical Name) Section 12. Ecologica Avoid release into the environment. Runoff from fire control or dilution wat No data available. No data available.	n.a.	thoroughly stu IARC n.a. DN	ACGIH	
CAS ; 12.1	Toxicological Effects: # Hazardous Complete NA (Trade Secret) Toxicity: Image: Complete Persistence and Degradability: Bioaccumulative Potential: Mobility in Soil: Results of PBT and vPvB	Section 11. Toxicologia The toxicological effects of this produ ponents (Chemical Name) Section 12. Ecologica Avoid release into the environment. Runoff from fire control or dilution wat No data available. No data available.	n.a.	thoroughly stu IARC n.a. DN	ACGIH	_



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		Section 13. Dispo	sal Consider	ations		
13.1 Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.						
		Section 14. Trar	nsport Inform	ation		
14.1 LAN	ND TRANSPORT (US	DOT):				
DOT Pi	oper Shipping Nam	e: Not dangerous goods.				
DOT Ha	azard Class:					
UN/NA	Number:					
14.1 LAN	ND TRANSPORT (Eu	ropean ADR/RID):				
	ID Shipping Name:	Not dangerous goods.				
UN Nu						
Hazard		\// A T A \-				
	TRANSPORT (ICAC ATA Shipping Name	-				
Additional		Transport in accordance with I	ocal state and fede	aral regulations		
Information	-	Transport in accordance with	ocal, state, and lede	an regulations.		
		Section 15 Page	latory Inform	ation		
		Section 15. Regu		alion		
		ments and Reauthorization Act	-			
CAS #		mponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
NA	(Trade Secret)		No	No	No	
CAS #		mponents (Chemical Name)	Other US EPA or State Lists			
NA	(Trade Secret)		CAA HAP,ODC: PROP.65: No	No; CWA NPDES:	No; TSCA: No; CA	
Regulatory Statement:	Information	This SDS was prepared in acc No.1272/2008.	ordance with 29 CF	R 1910.1200 and R	egulation (EC)	
		Section 16. Ot	her Informati	on		
Revision D	ate:	09/17/2019				
Additional	Information About	No data available.				
This Produ						
Company F	Policy or Disclaimer:	DISCLAIMER: This information	n is believed to be ad	ccurate and represe	nts the best information	
		currently available to us. Howe		-		
		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.				