

						1 1 1	
		Section 1. Id	entification of the Substance/	Mixture and of t	he Company/Ur	ndertaking	
.1	Produc	t Code:	21800				
	Produc	t Name:	MM-11253				
	Synony	ms:		3,8-tetramethyl-2-	naphthalenyl)-1,3	3-dithiolan-2-yl]-2-naphthalene	
	boxylic acid;						
.2	Relevant identified uses of the substance or mixture and uses advised against:						
	Relev	ant identified uses:	For research use only, not for	or human or veteri	inary 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				
		ite address: nation:	www.caymanchem.com		.1 (70)	4)074 2225	
			Cayman Chemical Company	/	+1 (734	4)971-3335	
1.4	-	ncy telephone num			. 1 (00)	0.404.0000	
	Emerg	gency Contact:	CHEMTREC Within USA and CHEMTREC Outside USA ar		-	0)424-9300	
						3)527-3887	
			Section 2. Hazar	rds Identific	ation		
2.1	Classifi	cation of the Substa					
	Label E	lements:					
	Label E GHS S GHS Based	lements: Signal Word: Hazard Phrases: I on evaluation of curr	nce or Mixture: None ently available data this substand	nce or mixture is n	not classifiable ac	cording to GHS.	
	Label E GHS S GHS Based GHS	lements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases:	nce or Mixture: None ently available data this substand	nce or mixture is n	not classifiable ac	cording to GHS.	
	Label E GHS S GHS Based GHS No ph	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply.	nce or Mixture: None ently available data this substand	nce or mixture is n	not classifiable ac	cording to GHS.	
	Label E GHS S GHS Based GHS No ph GHS	lements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases: rases apply. Response Phrases:	nce or Mixture: None ently available data this substand	nce or mixture is n	not classifiable ac	cording to GHS.	
	Label E GHS S GHS Based GHS No ph GHS	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply.	nce or Mixture: None ently available data this substand	nce or mixture is n	not classifiable ac	cording to GHS.	
	Label E GHS S GHS Based GHS No ph GHS	lements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa	nce or Mixture: None ently available data this substand			cording to GHS.	
2.2	Label E GHS S GHS Based GHS No ph GHS Pleas	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	nce or Mixture: None ently available data this substand al Phrases: r Storage and Section 13 for Disp	sposal information	1.	-	
2.2	Label E GHS S GHS B Based GHS B No ph GHS S Pleas 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 se Human Health	nce or Mixture: None ently available data this substand	sposal information nucous membran	ı. es and upper res	-	
2.2	Label E GHS S GHS B Based GHS B No ph GHS S Pleas 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 for the Human Health	nce or Mixture: None ently available data this substand al Phrases: r Storage and Section 13 for Disp Material may be irritating to the m	sposal information nucous membran gestion, or skin ab	ı. ies and upper res osorption.	-	
2.2	Label E GHS S GHS B Based GHS B No ph GHS S Pleas 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	nce or Mixture: None ently available data this substand al Phrases: r Storage and Section 13 for Disp Material may be irritating to the m May be harmful by inhalation, ing	sposal information nucous membran gestion, or skin ab ory system irritatic	n. les and upper res psorption. pn.	spiratory tract.	
2.2	Label E GHS S GHS B Based GHS B No ph GHS S Pleas 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	nce or Mixture: None ently available data this substand al Phrases: r Storage and Section 13 for Disp Material may be irritating to the m May be harmful by inhalation, ing May cause eye, skin, or respirato	sposal information nucous membran gestion, or skin ab ory system irritatic e toxicological pro	n. Jes and upper res Dosorption. Don. Doperties have not	piratory tract.	
2.1 2.2 2.3	Label E GHS S GHS B Based GHS B No ph GHS S Pleas Advers Effects	Iements: 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 and Symptoms:	nce or Mixture: None ently available data this substand al Phrases: r Storage and Section 13 for Disp Material may be irritating to the m May be harmful by inhalation, ing May cause eye, skin, or respirato Fo the best of our knowledge, the on 3. Composition/Int nents (Chemical Name)/	sposal information nucous membran gestion, or skin ab ory system irritatic e toxicological pro	n. les and upper res psorption. on. operties have not on Ingredier EC No./	piratory tract.	
2.2 2.3 CAS	Label E GHS S GHS B Based GHS No ph GHS Pleas Advers 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 se Human Health and Symptoms:	nce or Mixture: None ently available data this substand al Phrases: r Storage and Section 13 for Disp Material may be irritating to the m May be harmful by inhalation, ing May cause eye, skin, or respirato To the best of our knowledge, the on 3. Composition/Int nents (Chemical Name)/ on No.	sposal information nucous membran gestion, or skin ab ory system irritatio e toxicological pro iformation c	n. les and upper res psorption. on. operties have not	piratory tract. 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 A solid water stream may be inefficient.
5.2	Flammable Properties ar Hazards:	I d No data available.
		No data available.
	Flash Pt:	No data.
	Explosive Limits:	LEL: No data. UEL: No data.
	Autoignition Pt:	No data.
5.3	Fire Fighting Instructions	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.
		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 Precautions:	Take steps to avoid release into the environment, if safe to do so.
6.3	Methods and Material Fo	r Contain spill and collect, as appropriate.
	Containment and Cleanin	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	Neep 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 Use process enclosures, local exhaust ventilation, or other engineering control							
	(Ventilation etc.):	evels below recommended exposure limits.					
8.2.2	Personal protection equipment:						
	Eye Protection: S	afety 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.						
		acilities storing or utilizing this material should be equipped with an eyewash and a safety showe					
		Vash thoroughly after handling.					
	Ν	lo data available.					
	0	tion 0. Dhuaiad and Chaminal Dran artica					
	Sec	ction 9. Physical and Chemical Properties					
9.1	Information on Basic Physic	-					
	Physical States:	[]Gas []Liquid [X]Solid					
	Appearance and Odor:	A 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 m	nm No data.					
	Hg):						
	Vapor Density (vs. Air = 1):	No data.					
	Specific Gravity (Water = 1):	No data.					
	Solubility in Water:	No data.					
	Solubility Notes:	~100 mM in DMSO;					
	Octanol/Water Partition	No data.					
	Coefficient:						
	Autoignition Pt:	No data.					
		e: No data.					
	Decomposition Temperature	e. No data.					
	Decomposition Temperature Viscosity:	No data.					
9.2							
9.2	Viscosity:						



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10.1			Section 10. Stability ar	nd Reactiv	/ity			
10.1	Reactivit	ty:	No data available.					
10.2	Stability	:	Unstable [] Stable [X]					
10.3 Stability Note(s):			Stable if stored in accordance with info	rmation listed c	n the product	insert.		
	Polymer	ization:	Will occur [] Will not occur [X]					
10.4	Conditio	ons To Avoid:	No data available.					
10.5	Incompa	atibility - Materials	strong oxidizing agents					
To Avoid:								
10.6	Hazardous		carbon dioxide					
	Decomp	osition or	carbon monoxide					
	Byproducts:		hydrogen sulfide					
			Section 11. Toxicologic	al Informa	ition			
11.1	Informat	ion on	The toxicological effects of this product	have not been	thoroughly st	udied.		
	Toxicolo	gical Effects:						
CAS	#	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA	
3459)52-44-5	MM-11253	· ,	n.a.	n.a.	n.a.	n.a.	
	-		Contine 40 Erstent					
			Section 12. Ecologica	informati	on			
12.1	Toxicity:	:	Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.					
12.2			No data available.	12.2 Persistence and No data available.				
	Degradability:							
12.3	Bioaccu	mulative	No data available.					
12.3		mulative	No data available.					
12.3 12.4	Bioaccu	mulative I:	No data available. No data available.					
-	Bioaccu Potentia Mobility	mulative I: in Soil:						
12.4	Bioaccu Potentia Mobility	mulative I: in Soil: of PBT and vPvB	No data available.					
12.4	Bioaccu Potentia Mobility Results assessm	mulative I: in Soil: of PBT and vPvB	No data available.					
12.4 12.5	Bioaccu Potentia Mobility Results assessm	mulative I: in Soil: of PBT and vPvB nent:	No data available. No data available.	onsiderati	ons			
12.4 12.5	Bioaccu Potentia Mobility Results assessm Other ad	mulative I: in Soil: of PBT and vPvB nent:	No data available. No data available. No data available.					
12.4 12.5 12.6	Bioaccu Potentia Mobility Results assessm Other ad	mulative I: in Soil: of PBT and vPvB nent: Iverse effects:	No data available. No data available. No data available. Section 13. Disposal C	, and federal re	egulations.			
12.4 12.5 12.6	Bioaccu Potentia Mobility Results assessm Other ad	mulative I: in Soil: of PBT and vPvB nent: Iverse effects:	No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, state Section 14. Transport	, and federal re	egulations.			
12.4 12.5 12.6 13.1 14.1	Bioaccu Potentia Mobility Results assessm Other ad Waste D	mulative I: in Soil: of PBT and vPvB nent: Iverse effects: isposal Method:	No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, state Section 14. Transport	, and federal re	egulations.			
12.4 12.5 12.6 13.1 14.1	Bioaccu Potentia Mobility Results assessm Other ad Waste D	mulative I: in Soil: of PBT and vPvB nent: Iverse effects: isposal Method: RANSPORT (US I r Shipping Name:	No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, state Section 14. Transport	, and federal re	egulations.			
12.4 12.5 12.6 13.1 14.1	Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T	mulative I: in Soil: of PBT and vPvB nent: Iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class:	No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, state Section 14. Transport	, and federal re	egulations.			
12.4 12.5 12.6 13.1 14.1	Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T DOT Proper	mulative I: in Soil: of PBT and vPvB nent: Iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class:	No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, state Section 14. Transport DOT): Not dangerous goods.	, and federal re	egulations.			
12.4 12.5 12.6 13.1 14.1 C U 14.1	Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T OT Prope OT Hazard IN/NA Nun LAND T	mulative I: in Soil: of PBT and vPvB nent: Iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: nber:	No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, state Section 14. Transport DOT): Not dangerous goods.	, and federal re	egulations.			
12.4 12.5 12.6 13.1 14.1 C 14.1 U 14.1	Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T OT Prope OT Hazard IN/NA Nun LAND T	mulative I: in Soil: of PBT and vPvB nent: Iverse effects: isposal Method: RANSPORT (US D r Shipping Name: d Class: nber: RANSPORT (Euro hipping Name:	No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, state Section 14. Transport DOT): Not dangerous goods.	, and federal re	egulations.			
12.4 12.5 12.6 13.1 14.1 C U 14.1	Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T OT Proper OT Hazard IN/NA Nun LAND T	mulative I: in Soil: of PBT and vPvB hent: Iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: hber: RANSPORT (Euro hipping Name: r:	No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, state Section 14. Transport DOT): Not dangerous goods.	, and federal re	egulations.			
12.4 12.5 12.6 13.1 14.1 C U 14.1	Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T DOT Prope OT Hazard IN/NA Nun LAND T DR/RID SI	mulative I: in Soil: of PBT and vPvB hent: Iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: hber: RANSPORT (Euro hipping Name: r:	No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, state Section 14. Transport DOT): Not dangerous goods.	, and federal re	egulations.			
12.4 12.5 12.6 13.1 14.1 C U 14.1	Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T DOT Prope OT Hazard IN/NA Nun LAND T DR/RID SI	mulative I: in Soil: of PBT and vPvB hent: Iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: hber: RANSPORT (Euro hipping Name: r:	No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, state Section 14. Transport DOT): Not dangerous goods.	, and federal re	egulations.			
12.4 12.5 12.6 13.1 14.1 C U 14.1	Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T DOT Prope OT Hazard IN/NA Nun LAND T DR/RID SI	mulative I: in Soil: of PBT and vPvB hent: Iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: hber: RANSPORT (Euro hipping Name: r:	No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, state Section 14. Transport DOT): Not dangerous goods.	, and federal re	egulations.			
12.4 12.5 12.6 13.1 14.1 C U 14.1	Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T DOT Prope OT Hazard IN/NA Nun LAND T DR/RID SI	mulative I: in Soil: of PBT and vPvB hent: Iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: hber: RANSPORT (Euro hipping Name: r:	No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, state Section 14. Transport DOT): Not dangerous goods.	, and federal re	egulations.			

4
Calman
Caynan

14.3 AIR TRANSPORT (ICAO/IATA): ICAO/IATA Shipping Name: N

me: Not dangerous goods.

Additional Transport Information:

Section 15. Regulatory Information

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

CAS #	Hazardous Components (Chemical Name)		S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
345952-44-5	MM-11253		No	No	No	
CAS # Hazardous Compor		ponents (Chemical Name) Other US EPA or State Lists		•		
345952-44-5	MM-11253		CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No			
Regulatory Inf Statement:	ormation	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.				
		Section 16. Otl	ner Informatio	on		
Revision Date:		05/09/2017				
Additional Info	rmation About	No data available.				
This Product:						
This Product: Company Policy 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.				