

Revision: 01/16/2019 Supersedes Revision: 05/16/2016

		accord	ling to Regulation (EC) No. 1907/2006 as a	mended by (EC) No. 2015/8	30 and US OSHA HCS	2015			
			Identification of the Substan	_					
						lucitaking			
.1	Product		13697 (D) MC122						
	Product		(R)-MG132		1 formul 2 moth	(hut) I lougingmide			
	Synony		N-[(phenylmethoxy)carbonyl]-L-leucyl-N-[(1R)-1-formyl-3-methylbutyl]-L-leucinamide;						
.2			of the substance or mixture a	-	-				
	Releva	ant identified uses	s: For research use only, no	ot for human or veter	inary use.				
1.3	Details of the Supplier of the Safety Data Sheet:								
	Company Name: Cayman Chemical Comp		bany						
			1180 E. Ellsworth Rd.						
		the end does not	Ann Arbor, MI 48108						
		ite address:	www.caymanchem.com		. 4 (70)	1)074 0005			
		nation:	Cayman Chemical Comp	bany	+1 (734	4)971-3335			
1.4	-	ency telephone nu							
	Emerg	gency Contact:	CHEMTREC Within USA		-	0)424-9300			
			CHEMTREC Outside US	A and Canada:	+1 (703	3)527-3887			
			Section 2. Haz	zards Identific	ation				
2.1	Classifi	cation of the Sub	stance or Mixture:						
2.2	Label E	lements:							
	CH6 6	Signal Word:	Nono						
	GHS Signal Word: None GHS Hazard Phrases:								
			currently available data this subs	stance or mixture is r	ot classifiable ac	cording to GHS			
		Precaution Phrase	-						
			55.						
	No phrases apply.								
		Response Phrase	5.						
	-	rases apply.							
		Storage and Dispo							
			for Storage and Section 13 for	-					
2.3		e Human Health	Material may be irritating to the	he mucous membrar	ies and upper res				
	Fffects					piratory tract.			
		and Symptoms:	May be harmful by inhalation	-	-	piratory tract.			
		and Symptoms:	May cause eye, skin, or respi	iratory system irritation	on.				
			May cause eye, skin, or respi To the best of our knowledge	iratory system irritation, the toxicological pro-	on. operties have not	been thoroughly investigated			
			May cause eye, skin, or respi	iratory system irritation, the toxicological pro-	on. operties have not	been thoroughly investigated			
CAS		Sec	May cause eye, skin, or respi To the best of our knowledge	iratory system irritation, the toxicological pro-	on. operties have not	been thoroughly investigated			
CAS		Sec	May cause eye, skin, or respi To the best of our knowledge tion 3. Composition, ponents (Chemical Name)/	iratory system irritation , the toxicological pro- /Information (	on. operties have not on Ingrediei	been thoroughly investigated			
RTE	#/	Sec Hazardous Com	May cause eye, skin, or respi To the best of our knowledge tion 3. Composition, ponents (Chemical Name)/	iratory system irritation , the toxicological pro- /Information (	on. operties have not on Ingrediei EC No./	been thoroughly investigated			



Revision: 01/16/2019 Supersedes Revision: 05/16/2016

		Section 4. First Aid Measures
l.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 contaminate 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 solid water stream may be inefficient.
5.2	Flammable Properties an Hazards:	<b>d</b> 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	<b>s:</b> 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, Protective Equipment an Emergency Procedures:	Avoid raising and breathing dust, and provide adequate ventilation. <b>d</b> As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, 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	${f r}$ Contain spill and collect, as appropriate. ${f ng}$ Transfer to a chemical waste container for disposal in accordance with local regulations.
		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.
	Sec	tion 8. Exposure Controls/Personal Protection
8.1	Exposure Parameters:	

Multi-region format



Revision: 01/16/2019 Supersedes Revision: 05/16/2016

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							
	<b>Respiratory Equipment</b>	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 facility and a safety						
		shower.						
		Wash thoroughly after handling.						
	No data available.							
	Section 9. Physical and Chemical Properties							
9.1	Information on Basic Physical and Chemical Properties							
	Physical States:	[]Gas []Liquid [X]Solid						
	Appearance and Odor:	A crystalline solid						
	nH.	No data						

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.			
Specific Gravity (Water = 1):	No data.			
Solubility in Water:	No data.			
Solubility Notes:	~25 mg/ml in EtOl	H, DMSO, & DMF	,	
Octanol/Water Partition	No data.			
Coefficient:				
Autoignition Pt:	No data.			
Decomposition Temperature:	No data.			
Viscosity:	No data.			
9.2 Other Information				
Percent Volatile:	No data.			
Molecular Formula & Weight:	C26H41N3O5	475.6		

Multi-region format



Multi-region format

Revision: 01/16/2019 Supersedes Revision: 05/16/2016

	<b>11</b> 51				S	upersedes Revis	ion: 05/16/20	
			Section 10. Stability a	nd Reactiv	/ity			
10.1	Reactivit	y:	No data available.					
10.2	Stability: Unstable [ ] Stable [ X ]							
10.3 Stability Note(s):		Note(s):	Stable if stored in accordance with inf	ormation listed o	n the product	insert.		
	Polymeri	zation:	Will occur [ ] Will not occur [ X ]					
10.4 Conditions To Avoid:			No data available.					
10.5 Incompatibility - Materials			strong oxidizing agents					
	To Avoid	l:						
10.6	Hazardou		carbon dioxide					
	-	osition or	carbon monoxide					
	Byprodu	cts:	nitrogen oxides					
			Section 11. Toxicologie	cal Informa	ition			
11.1	Informati		The toxicological effects of this produc	ct have not been	thoroughly st	udied.		
	Toxicolo	gical Effects:						
CAS	#	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA	
12118	877-36-9	(R)-MG132		n.a.	n.a.	n.a.	n.a.	
			Section 12. Ecologica	al Informati	on			
12.1	Toxicity:		Avoid release into the environment.					
			Runoff from fire control or dilution water may cause pollution.					
				• •				
12.2	Persister	nce and	No data available.					
12.2	Persister Degradal							
12.2 12.3		bility:						
	Degradal	bility: nulative	No data available.					
	Degradal Bioaccur	bility: nulative :	No data available.					
12.3	Degradal Bioaccur Potential Mobility i	bility: nulative : in Soil:	No data available. No data available.					
12.3 12.4	Degradal Bioaccur Potential Mobility i	bility: mulative l: in Soil: of PBT and vPvB	No data available. No data available. No data available.					
12.3 12.4	Degradal Bioaccur Potential Mobility i Results o assessm	bility: mulative l: in Soil: of PBT and vPvB	No data available. No data available. No data available.					
12.3 12.4 12.5	Degradal Bioaccur Potential Mobility i Results o assessm	bility: mulative : in Soil: of PBT and vPvB ent:	No data available. No data available. No data available. No data available.		ons			
12.3 12.4 12.5	Degradal Bioaccur Potential Mobility i Results o assessm Other ad	bility: mulative : in Soil: of PBT and vPvB ent:	No data available. No data available. No data available. No data available. No data available.	Considerati				
12.3 12.4 12.5 12.6	Degradal Bioaccur Potential Mobility i Results o assessm Other ad	bility: mulative : in Soil: of PBT and vPvB ent: verse effects:	No data available. No data available. No data available. No data available. No data available. <b>Section 13. Disposal C</b>	Considerati	gulations.			
12.3 12.4 12.5 12.6	Degradal Bioaccur Potential Mobility i Results o assessm Other ad Waste Di	bility: mulative : in Soil: of PBT and vPvB ent: verse effects:	No data available. No data available. No data available. No data available. No data available. <b>Section 13. Disposal C</b> Dispose in accordance with local, stat <b>Section 14. Transpo</b>	Considerati	gulations.			
12.3 12.4 12.5 12.6 13.1 14.1	Degradal Bioaccur Potential Mobility i Results o assessm Other ad Waste Di	bility: mulative : in Soil: of PBT and vPvB ent: verse effects: sposal Method:	No data available. No data available. No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, stat Section 14. Transpo	Considerati	gulations.			
12.3 12.4 12.5 12.6 13.1 14.1 D	Degradal Bioaccur Potential Mobility i Results o assessm Other ad Waste Di	bility: mulative : in Soil: of PBT and vPvB ent: verse effects: sposal Method: RANSPORT (US I	No data available. No data available. No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, stat Section 14. Transpo	Considerati	gulations.			
12.3 12.4 12.5 12.6 13.1 14.1 D	Degradal Bioaccur Potential Mobility i Results o assessm Other ad Waste Di LAND TR	bility: mulative : in Soil: of PBT and vPvB ent: verse effects: sposal Method: RANSPORT (US I r Shipping Name: d Class:	No data available. No data available. No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, stat Section 14. Transpo	Considerati	gulations.			
12.3 12.4 12.5 12.6 13.1 14.1 D	Degradal Bioaccur Potential Mobility i Results o assessm Other ad Waste Di LAND TR OT Proper OT Hazard	bility: mulative : in Soil: of PBT and vPvB ent: verse effects: sposal Method: RANSPORT (US I r Shipping Name: d Class:	No data available. No data available. No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, stat Section 14. Transpo DOT): Not dangerous goods.	Considerati	gulations.			
12.3 12.4 12.5 12.6 13.1 14.1 D U 14.1	Degradal Bioaccur Potential Mobility i Results o assessm Other ad Waste Di UNNA TF	bility: mulative : in Soil: of PBT and vPvB ent: verse effects: sposal Method: RANSPORT (US I Shipping Name: d Class: ber:	No data available. No data available. No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, stat Section 14. Transpo DOT): Not dangerous goods.	Considerati	gulations.			
12.3 12.4 12.5 12.6 13.1 14.1 D U 14.1 A	Degradal Bioaccur Potential Mobility i Results o assessm Other ad Waste Di UNNA TF	bility: mulative : in Soil: of PBT and vPvB ent: verse effects: sposal Method: RANSPORT (US I Shipping Name: d Class: ber: RANSPORT (Euro hipping Name:	No data available. No data available. No data available. No data available. No data available. Section 13. Disposal C Dispose in accordance with local, stat Section 14. Transpo DOT): Not dangerous goods.	Considerati	gulations.			

4
Contractor
Cayman

Revision: 01/16/2019 Supersedes Revision: 05/16/2016

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name:

: Not dangerous goods.

Additional Transport Information:

# Section 15. Regulatory Information

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

CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
1211877-36-9	(R)-MG132		No	No	No	
CAS # Hazardous Comp		ponents (Chemical Name)	Other US EPA or State Lists			
1211877-36-9	(R)-MG132		CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No			
Regulatory Info Statement:	ormation	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.				
		Section 16. Oth	ner Informatio	n		
Revision Date:		01/16/2019				
Additional Info	rmation About	No data available.				
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.				