

Version	Revision Date:	SDS Number:	Date of last issue: 04/04/2023
6.1	09/30/2023	679941-00019	Date of first issue: 05/19/2016

### **SECTION 1. IDENTIFICATION**

Product name	:	Daptomycin Injection Formulation - 2nd Generation		
Manufacturer or supplier's	deta	ails		
Company name of supplier	:	Merck & Co., Inc		
Address	:	126 E. Lincoln Avenue		
		Rahway, New Jersey U.S.A. 07065		
Telephone	:	908-740-4000		
Emergency telephone	:	1-908-423-6000		
E-mail address	:	EHSDATASTEWARD@merck.com		
Recommended use of the chemical and restrictions on use				
Recommended use	:	Pharmaceutical		
Restrictions on use	:	Not applicable		

### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR
1910.1200)

Combustible dust

Specific target organ toxicity	:	Category 2 (muscle, Kidney, Nervous system)
<ul> <li>repeated exposure</li> </ul>		
(Dermal)		

GHS label elements Hazard pictograms	
Signal Word	Warning
Hazard Statements	If small particles are generated during further processing, han- dling or by other means, may form combustible dust concentra- tions in air. H373 May cause damage to organs (muscle, Kidney, Nervous system) through prolonged or repeated exposure in contact with skin.
Precautionary Statements	<b>Prevention:</b> P260 Do not breathe dust. <b>Response:</b> P314 Get medical attention if you feel unwell. <b>Disposal:</b>

P501 Dispose of contents and container to an approved waste



Version	Revision Date:	SDS Number:	Date of last issue: 04/04/2023
6.1	09/30/2023	679941-00019	Date of first issue: 05/19/2016

disposal plant.

### Other hazards

Dust contact with the eyes can lead to mechanical irritation. Contact with dust can cause mechanical irritation or drying of the skin.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Components

Chemical name	CAS-No.	Concentration (% w/w)
Sucrose	57-50-1	>= 50 - < 70
Daptomycin	103060-53-3	>= 30 - < 50
Actual concentration is with	bold as a trade secret	

Actual concentration is withheld as a trade secret

### SECTION 4. FIRST AID MEASURES

General advice	:	In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.
If inhaled	:	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
In case of skin contact	:	In case of contact, immediately flush skin with soap and plenty of water.
In case of eye contact	:	Get medical attention if symptoms occur. If in eyes, rinse well with water. Get medical attention if irritation develops and persists.
If swallowed	:	If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.
Most important symptoms and effects, both acute and delayed	:	May cause damage to organs through prolonged or repeated exposure in contact with skin. Contact with dust can cause mechanical irritation or drying of
Protection of first-aiders	:	the skin. Dust contact with the eyes can lead to mechanical irritation. First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment
Notes to physician	:	when the potential for exposure exists (see section 8). Treat symptomatically and supportively.

### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media	:	Water spray
		Alcohol-resistant foam
		Carbon dioxide (CO2)
		Dry chemical
Unsuitable extinguishing media	:	None known.



Vers 6.1	sion	Revision Date: 09/30/2023		9941-00019	Date of last issue: 04/04/2023 Date of first issue: 05/19/2016
	Specific hazards during fire fighting		:	Avoid generating dust; fine dust dispersed in air in suffici concentrations, and in the presence of an ignition source potential dust explosion hazard. Exposure to combustion products may be a hazard to he	
	Hazard ucts	ous combustion prod-	:	Carbon oxides	
	Specific ods	c extinguishing meth-	:	cumstances and t Use water spray t	measures that are appropriate to local cir- he surrounding environment. o cool unopened containers. ged containers from fire area if it is safe to do
	Special for fire-	protective equipment fighters	:		e, wear self-contained breathing apparatus. ective equipment.
SEC	CTION 6	. ACCIDENTAL RELE	ASI	EMEASURES	
	tive equ	al precautions, protec- uipment and emer- procedures	:		ective equipment. ing advice (see section 7) and personal ent recommendations (see section 8).
	Enviror	nmental precautions	:	Retain and dispos	akage or spillage if safe to do so. e of contaminated wash water. should be advised if significant spillages
		ls and materials for ment and cleaning up	:	container for disper Avoid dispersal of with compressed Dust deposits sho surfaces, as these released into the a Local or national r disposal of this ma employed in the c determine which r Sections 13 and 1	dust in the air (i.e., clearing dust surfaces

### SECTION 7. HANDLING AND STORAGE

Technical measures	:	Static electricity may accumulate and ignite suspended dust causing an explosion.
		Provide adequate precautions, such as electrical grounding
		and bonding, or inert atmospheres.
Local/Total ventilation	:	Use only with adequate ventilation.
Advice on safe handling	:	Do not get on skin or clothing.
		Do not breathe dust.

according to the OSHA Hazard Communication Standard



# Daptomycin Injection Formulation - 2nd Generation

Version 6.1	Revision Date: 09/30/2023	SDS Number: 679941-00019	Date of last issue: 04/04/2023 Date of first issue: 05/19/2016
Con	ditions for sofe storage	practice, base assessment Minimize dust Keep containe Keep away fro Take precauti Take care to p environment.	with eyes. ordance with good industrial hygiene and safety ed on the results of the workplace exposure generation and accumulation. er closed when not in use. om heat and sources of ignition. onary measures against static discharges. orevent spills, waste and minimize release to the
Con	ditions for safe storage	Store in accor	rly labeled containers. dance with the particular national regulations.
Mate	erials to avoid	: Do not store v Strong oxidizi	vith the following product types: ng agents

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

inert or nuisance dust	50 Million particles per cubic foot Value type (Form of exposure): TWA (total dust) Basis: OSHA Z-3					
	15 mg/m³ Value type (Form of exposure): TWA (total dust) Basis: OSHA Z-3					
	5 mg/m³ Value type (Form of exposure): TWA (respirable fraction) Basis: OSHA Z-3					
	15 Million particles per cubic foot Value type (Form of exposure): TWA (respirable fraction) Basis: OSHA Z-3					
Dust, nuisance dust and par- ticulates	10 mg/m³ Value type (Form of exposure): PEL (Total dust) Basis: CAL PEL					
	5 mg/m³ Value type (Form of exposure): PEL (respirable dust fraction) Basis: CAL PEL					
Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis		
Sucrose	57-50-1	TWA	10 mg/m <sup>3</sup>	ACGIH		
		TWA (Res- pirable)	5 mg/m <sup>3</sup>	NIOSH REL		
		TWA (total)	10 mg/m <sup>3</sup>	NIOSH REL		

according to the OSHA Hazard Communication Standard



# Daptomycin Injection Formulation - 2nd Generation

ersion .1	Revision Date: 09/30/2023		DS Number: /9941-00019	Date of last issue: 04/04/2023 Date of first issue: 05/19/2016			
				dust) TWA (respir- able fraction)	5 mg/m <sup>3</sup>	OSHA Z-1	
Dapte	omycin		103060-53-3	TWA	800 µg/m3 (OEB 2)	Internal	
Engi	neering measures	:	<ul> <li>Use feasible engineering controls to minimize exposure t compound.</li> <li>All engineering controls should be implemented by facility design and operated in accordance with GMP principles protect products, workers, and the environment.</li> </ul>				
Pers	onal protective equip	ment	:				
	iratory protection	:	maintain vapo concentrations unknown, app Follow OSHA use NIOSH/M by air purifying hazardous cho supplied respi release, expos	r exposures belows are above recompriate respirator respirator regula SHA approved r g respirators aga emical is limited rator if there is a sure levels are u where air purifyi	ntilation is recommen- by recommended limits or a ory protection should ations (29 CFR 1910 espirators. Protection ainst exposure to any Use a positive pres- iny potential for unco- nknown, or any other ng respirators may r	nits. Where are d be worn. 0.134) and on provided / sure air ontrolled er	
	l protection aterial	:	Chemical-resi	stant gloves			
Eye p	protection	:	Wear safety glasses with side shields or goggles. If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles. Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or				
	and body protection ene measures	:	aerosols. Work uniform or laboratory coat. If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.				

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	lyophilized cake
Color	:	light brown





# Daptomycin Injection Formulation - 2nd Generation

Vers 6.1	sion	Revision Date: 09/30/2023		S Number: 9941-00019	Date of last issue: 04/04/2023 Date of first issue: 05/19/2016			
	Odor		:	No data available				
	Odor Threshold		:	: No data available				
	рН		:	6.5 - 7.3 (as aqueous solu	tion)			
	Melting	point/freezing point	:	No data available	)			
	Initial b range	oiling point and boiling	:	No data available	9			
	Flash p	oint	:	Not applicable				
	Evapor	ation rate	:	No data available	)			
	Flamma	ability (solid, gas)	:	May form explosi handling or other	ve dust-air mixture during processing, means.			
	Flamma	ability (liquids)	:	No data available				
		explosion limit / Upper bility limit	:	No data available				
		explosion limit / Lower bility limit	:	No data available				
	Vapor p	pressure	:	No data available	)			
	Relative	e vapor density	:	No data available	)			
	Relative	e density	:	No data available	)			
	Density	,	:	No data available	)			
	Solubili Wat	ty(ies) er solubility	:	No data available	)			
	Partitio octanol	n coefficient: n-	:	Not applicable				
		hition temperature	:	No data available				
	Decom	position temperature	:	No data available				
	Viscosi Visc	ty :osity, kinematic	:	No data available	9			
	Explosi	ve properties	:	Not explosive				
	Oxidizir	ng properties	:	The substance of	r mixture is not classified as oxidizing.			
	Particle	size	:	No data available	)			



according to the OSHA Hazard Communication Standard

### Daptomycin Injection Formulation - 2nd Generation

Version	Revision Date:	SDS Number:	Date of last issue: 04/04/2023
6.1	09/30/2023	679941-00019	Date of first issue: 05/19/2016

### SECTION 10. STABILITY AND REACTIVITY

ndling or other means. In react with strong oxidizing agents.
eat, flames and sparks. oid dust formation. didizing agents hazardous decomposition products are known.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

### Acute toxicity

Not classified based on available information.

#### **Components:**

Sucrose:

Acute oral toxicity

: LD50 (Rat): 29,700 mg/kg

#### Skin corrosion/irritation

Not classified based on available information.

### **Components:**

### Daptomycin:

Species	:	Rabbit
Result	:	Mild skin irritation

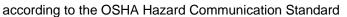
### Serious eye damage/eye irritation

Not classified based on available information.

### Components:

### Daptomycin:

Species	:	Rabbit
Result	:	Mild eye irritation





Vers 6.1	sion	Revision Date: 09/30/2023	-	9941-00019	Date of last issue: 04/04/2023 Date of first issue: 05/19/2016				
	Respiratory or skin sensitization								
	Skin sensitization Not classified based on available information.								
	<b>Respiratory sensitization</b> Not classified based on available information.								
		<b>cell mutagenicity</b> ssified based on availa	able	information.					
	Compo	onents:							
	Sucros Genoto	se: exicity in vitro	:	Test Type: In vitro Result: negative	o mammalian cell gene mutation test				
	<b>Daptor</b> Genoto	nycin: xicity in vitro	:	Test Type: Bacter Result: negative	ial reverse mutation assay (AMES)				
				Test Type: Chrom Result: negative	nosome aberration test in vitro				
					o mammalian cell gene mutation test se lymphoma cells				
				Test Type: DNA c thesis in mammal Result: negative	lamage and repair, unscheduled DNA syn- ian cells (in vitro)				
	Genoto	xicity in vivo	:	cytogenetic assay Species: Mouse	nalian erythrocyte micronucleus test (in vivo /) : Intraperitoneal injection				
				mammalian liver of Species: Hamster					

### Carcinogenicity

Not classified based on available information.

- **IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.



Version 6.1	Revision Date: 09/30/2023		DS Number: /9941-00019	Date of last issue: 04/04/2023 Date of first issue: 05/19/2016
NTP	5			ent at levels greater than or equal to 0.1% is ed carcinogen by NTP.
Repro	oductive toxicity			
Not cl	lassified based on ava	ilable	information.	
Comp	oonents:			
Dapto	omycin:			
Effect	s on fertility	:	Species: Rat Application Ro	tility/early embryonic development ute: Intravenous injection L: 150 mg/kg body weight cts on fertility.
Effect	Effects on fetal development :		Species: Rat Application Ro Developmenta	bryo-fetal development ute: Intravenous injection I Toxicity: NOAEL: 75 mg/kg body weight nificant adverse effects were reported
			Species: Rabb Application Ro Developmenta	bryo-fetal development it ute: Intravenous injection I Toxicity: NOAEL: 75 mg/kg body weight nificant adverse effects were reported
	-single exposure lassified based on ava	ilable	information.	
May c			uscle, Kidney, N	ervous system) through prolonged or repeated
•	sure in contact with ski <b>conents:</b>	11.		
-	omycin: et Organs		muscle Kidney	/ Nervous system

Assessment

 muscle, Klaney, Nervous system
 May cause damage to organs through prolonged or repeated exposure.

### Repeated dose toxicity

### Components:

### Daptomycin:

Species	:	Dog
NOAEL	:	20 mg/kg
LOAEL	:	40 mg/kg
Application Route	:	Intravenous
Exposure time	:	3 Months

according to the OSHA Hazard Communication Standard



# Daptomycin Injection Formulation - 2nd Generation

Version 6.1	Revision Date: 09/30/2023		9941-00019	Date of last issue: 04/04/2023 Date of first issue: 05/19/2016	
Targe	et Organs	:	Skeletal muscl	e	
NOAI Applio Expo	Species NOAEL Application Route Exposure time Remarks		Monkey 10 mg/kg Intravenous 1 Months No significant adverse effects were reported		
Expo Targe	ies cation Route sure time et Organs otoms	:	Dog Intravenous 28 Days Skeletal muscle muscle twitchir	e, Nervous system ig	
Expo		:	Juvenile dog 50 mg/kg Intravenous 28 Days Skeletal muscle	e, Nervous system	
Aspiration toxicity Not classified based on avail Experience with human exp					
Com	ponents:				
•	omycin: ral Information	:	Symptoms: Ra	sh, Diarrhea, vaginitis	

### **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity No data available
Persistence and degradability No data available
Bioaccumulative potential
Components:
Sucrose: Partition coefficient: n- : Pow: < 1 octanol/water
Mobility in soil No data available
Other adverse effects No data available



according to the OSHA Hazard Communication Standard

### Daptomycin Injection Formulation - 2nd Generation

Version	Revision Date:	SDS Number:	Date of last issue: 04/04/2023
6.1	09/30/2023	679941-00019	Date of first issue: 05/19/2016

### SECTION 13. DISPOSAL CONSIDERATIONS

### **Disposal methods**

•		
Waste from residues	:	Dispose of in accordance with local regulations.
		Do not dispose of waste into sewer.
Contaminated packaging	: Empty containers should be taken to an ap	Empty containers should be taken to an approved waste
		handling site for recycling or disposal.
		If not otherwise specified: Dispose of as unused product.

### SECTION 14. TRANSPORT INFORMATION

### International Regulations

### UNRTDG

Not regulated as a dangerous good

### IATA-DGR

Not regulated as a dangerous good

### IMDG-Code

Not regulated as a dangerous good

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### **Domestic regulation**

**49 CFR** Not regulated as a dangerous good

### Special precautions for user

Not applicable

### SECTION 15. REGULATORY INFORMATION

### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	Combustible dust Specific target organ toxicity (single or repeated exposure)
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

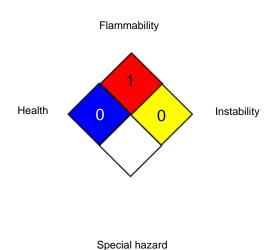


Version 6.1	Revision Date: 09/30/2023	SDS Number: 679941-00019	Date of last issue: 04/04/2023 Date of first issue: 05/19/2016		
US St	ate Regulations				
Penns	sylvania Right To Kno	W			
	Sucrose Daptomycin		57-50-1 103060-53-3		
California Permissible Exposure Limits for Chemical Contaminants					
	Sucrose		57-50-1		
The ingredients of this product are reported in the following inventories:					
AICS		: not determined			
DSL		: not determined			
IECSC	2	: not determined			

### **SECTION 16. OTHER INFORMATION**

### Further information

NFPA 704:



### HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

### Full text of other abbreviations

ACGIH CAL PEL		USA. ACGIH Threshold Limit Values (TLV) California permissible exposure limits for chemical contami-
NIOSH REL		nants (Title 8, Article 107) USA. NIOSH Recommended Exposure Limits
OSHA Z-1		USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-
03HA 2-1	•	its for Air Contaminants
OSHA Z-3	:	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
ACGIH / TWA	:	8-hour, time-weighted average



Version	Revision Date: 09/30/2023	SDS Number:	Date of last issue: 04/04/2023
6.1		679941-00019	Date of first issue: 05/19/2016
NIOS OSHA	PEL / PEL H REL / TWA A Z-1 / TWA A Z-3 / TWA		average concentration for up to a 10-hour a 40-hour workweek ghted average

AIIC - Australian Inventory of Industrial Chemicals: ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC -International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to	:	Internal technical data, data from raw material SDSs, OECD
compile the Material Safety		eChem Portal search results and European Chemicals Agen-
Data Sheet		cy, http://echa.europa.eu/

Revision Date

: 09/30/2023

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified



Version	Revision Date:	SDS Number:	Date of last issue: 04/04/2023
6.1	09/30/2023	679941-00019	Date of first issue: 05/19/2016

in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8