

# SAFETY DATA SHEET

:						1		1.1.1	Date	Accesse	d: 25/08	3/2023
		÷			·		1	1	Dat	e Revise	d: 12/12	2/2022
		н н н		:	н н н			1 - 1 1		:		
SEC	TION	1. ID	ENT	IFICA <sup>-</sup>	ΓΙΟΝ							
				Acetate H						1999 - A.	: • •	
					-		1	·			1	
Relev	ant iden	tified us	ses of t	he subst	ance: S	Scienti	fic resea	rch and	develo	opment		*
Suppl	lier detai	ls:										
Stanfo	ord Advar	nced Ma	iterials		: • •							
E-mai	l: sales@	)samate	rials.co	m								
Tel: (9	49) 407-	8904		1.	·		÷.,	1.1		1	1	
Addre				ake Fore								
								1				
SEC		2 H	۸7٨۵	rds ie				N an	:			:
Classi	fication o	of the su	bstance	e or mixtu	re		1	1. I.I.			1.1	
GHS0	7				1 I		:					
Skin Ir				irritation.			,	I				
Eye Ir	rit. 2A H3	319 <u>C</u> au	ses ser	ious eye i	rritation	I.			:			
STOT	SE 3 H3	35 May	cause i	respirator	y irritatio		1					
GHS I	abel elen	nents					1	1. J. J.			1.1	
The su	ubstance	is class	ified an	d labeled	accord	ing to t	he Globa	lly Harm	nonized	System	(GHS).	
	-											

Hazard pictograms

GHS07

Signal word Warning

Hazard-determir	ning co	mponei	nts of labe	eling:		÷.,	5			·		:
Lutetium(III) ace	tate hy	drate (	99.9%-Lu									
Hazard stateme	nts	· · · <sup>*</sup>									'	
H315 Causes sk	kin irrita	ation.										
H319 Causes se	erious e	eye irrita	ation.									
H335 May cause	e respir	ratory ir	ritation.Pı	recautio	nary st	atements	· · ·		÷.,	1		1
P101 If medical	advice	is need	ded, have	product	t contai	ner or lat	oel at ha	ind.				
P102 Keep out o	of reach	n of chil	ldren.			1		5.7	8			
P103 Read labe	before	e use.						1			1	
P262 Do not get	t in eye	s, on sl	kin, or on	clothing		1		,				
P280 Wear prote	ective ç	gloves/p	orotective	clothing	g/eye p	rotection/	face pro	otection		1		1
P305+P351+P3	38 IF II	N ĘYES	3: Rinse c	autiousl	y with v	water for	several	miņute	s. Remov	ve conta	ct	
lenses, if												
present and eas	y to do	. Contir	nue rinsin	g. ; · ·			: • •					
P304+P340 IF II	NHALE	:D: Ren	nove victi	m to free	sh air a	nd keep	at rest ir	n a posi	tion com	fortable	for	
breathing.												÷.
P403+P233 Stor	re in a v	well-vei	ntilated pl	ace. Ke	ep ċon	tainer tigl	htly clos	ed.			<sup>1</sup>	
P501 Dispose o	f conter	nts/con	tainer in a	accordar	nce wit	h local/re	gional/n	ational/	internatio	onal		
regulations.	: • •								111	111		
Classification sy	/stem:			1			·			·		
NFPA ratings (s	cale 0 -	- 4)										
1		· · · <sup>*</sup>			'			· · · <sup>*</sup>			<sup>1</sup>	
0												
0						. * *						
Health = $1$	1			1 		1	·		÷.,	1		1
Fire = 0					,							
Reactivity = 0						:						
HMIS-ratings (so	cale 0 -	· 4)						1			:	
HEALTH												
FIRE	1.1			1.1	1.1.1	1	1			1		1
									,			

	i.			1			,				1	
REACTIVITY	1			·			1			1		1
1												
Health = 1		'										
Fire = 0 Reactivity = 0	:	:	.''	: ' '	;		;···	1		;	:	. • •
Other hazards	1			1						1		1
Results of PBT a	and vPv	vB asse	essment	· ·	'	:	н н 1	'	;		'	;
vPvB: N/A	1 1 1 1						:**					

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances CAS # / Substance Name 18779-08-3 Lutetium(III) acetate hydrate (99.9%-Lu) (REO) Identification number(s) EC number: 242-566-3

### **SECTION 4. FIRST AID MEASURES**

Description of first aid measures

If inhaled: In case of unconsciousness place patient stably in side position for transportation.

In case of skin contact: Immediately wash with soap and water; rinse thoroughly.

In case of eye contact:Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

If swallowed: If symptoms persist consult doctor.

Most important symptoms and effects, both acute and delayed:

No data available

Indication of any immediate medical attention and special treatment needed

No data available

## **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture No data available

Advice for firefighters

Protective equipment: No special measures required.

# SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Not required. Environmental precautions: No special measures required. Methods and materials for containment and cleanup: Ensure adequate ventilation. Reference to other sections See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### **SECTION 7. HANDLING AND STORAGE**

Precautions for safe handling No special precautions are necessary if used correctly. Information about protection against explosions and fires: No special measures required. Conditions for safe storage, including any incompatibilities: Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Not required. Further information about storage conditions: Keep receptacle tightly sealed. Specific end use(s) No data available

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems: No further data; see item 7. Control parameters

Components with limit values that require monitoring at the workplace: Not required. Additional information: The lists that were valid during the creation were used as basis. Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use

respiratory protective device that is independent of circulating air.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the

chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the

degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of

quality and

varies from manu	ufacturer	to ma	nufacture	r.,			·			·			
Penetration time	Penetration time of glove material												
The exact break through time has to be found out by the manufacturer of the protective gloves and													
has to be observed.		1	.''								:		
Eye protection:	1		1.	·		÷.,	1			·			
Tightly sealed go	ggles	'									'		

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical a	nd chemic	al prop	erties		·			· · ·		
Appearance:			'							
Form: Crystalline										
Color: White		; • •			; • •	-		:**		
Odor: Odorless										
Odor threshold: No data availab	ole.						<b>'</b> .			
pH: N/A			'				1		1.1 <sup>1</sup>	
Melting point/Melting range: no	data °C									
Boiling point/Boiling range: Und	etermined	l. <sup>; ; ; ;</sup>			: • •			:**		
Flash point: N/A		·			·			·		
Flammability (solid, gas): Produ	ict is not fl	ammak	ole.							
Ignition temperature:						<sup>1</sup>			<sup>1</sup>	
Decomposition temperature: No	o data ava	ilable.								
Autoignition: No data available.										
Danger of explosion: Product de	oes not pr	esent a	an explo	sion haza	ırd.			1		
Explosion limits: Lower: No data available.			<sup>1</sup>			'			'	
Upper: No data available. Vapor pressure: no data hPa		111	:		:**	:		:	:	. '
Density: No data available.					1			1 		

			1					. * *	1		
Relative density No d	ata avai	lable.	5		÷.,	1	1.1.1		5		1
Vapor density N/A											
Evaporation rate N/A		-		· · '	1		· · <sup>*</sup>				
Solubility in / Miscibili							,			,	
Water: Insoluble.	;			1			:			1	
Partition coefficient (n	i-octano	l/water): I	No data	availab	le.Visco	sity:	1.1.1		1		1
Dynamic: N/A		:		'	:		'				
Kinematic: N/A		,			,	,			,		
Organic solvents: 0.0	%								:		
Solids content: 100.0				,				,			
Other information No	data ava	ailable	1. i i		1	1			1		1
··· : : : : : : : : : : : : : : : : : :											
	OTAP	<b></b>	/ A								
SECTION 10.	51 At			JKE					: • •		

Read	Juvity	
1.1.1		

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No data available

Incompatible materials: No data available

Hazardous decomposition products: No dangerous decomposition products known.

# SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity:

Primary irritant effect: on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

	1	:		1					
Sensitization: No sensitizing effects know	vn.		:	·			·		:
Additional toxicological information									
Carcinogenic categories				1					
IARC (International Agency for Research									
Substance is not listed.									
NTP (National Toxicology Program)	·			<b>1</b>			1		1
Substance is not listed.		'	:		'				:
OSHA-Ca (Occupational Safety & Health				ı					
Substance is not listed.	1 1 1 1			1.1.1					
	•		÷.,	1. 			1		:
SECTION 12. ECOLOGICA		NFO	RMA	ΓΙΟΝ					
Toxicity		1 1							
Aquatic toxicity: No data available									
Persistence and degradability No data av									
Bioaccumulative potential No data availa							1 		
Mobility in soil No data available		'		н н н			н н н		-
Additional ecological information: Not kn	own to	be haz	zardous	to water.					
Results of PBT and vPvB assessment				; · · ·			111		
PBT: N/A	·			1	1.1.1		1		:
vPvB: N/A									
Other adverse effects No data available		· · '			'			'	
				111				;	
SECTION 13. DISPOSAL	CON		ERAT	IONS					
							1		÷.
Waste treatment methods Recommendation:			4 4 1	н н Н	'	÷		<sup>1</sup>	1
Must not be disposed of together with ho	usehc	old garb	age. Do	not allow	produ	ct to ente	er drains,	:	

sewage systems, or other water courses system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

	FURI		<b>N</b>					
	1			1				. '
1						1		:
	'							
<b>'</b>		1.	<b>'</b>		1.	'		:
· · ·		1		'				
				1		: • •		
		1						
					<b>`</b> ,			
f	<sup>1</sup>	1	1 I				1.1	
; • •	1			1	19	; • •		. '
1			1 			1		;
RYI	NFOI	RMAT	ION		:		'	
	-	-						
								. '
ances):						1		:
	<sup>1</sup>	:	н н н		:	1 I		
	f ions/leq ances):	f TYNFOI TYNFOI TYNFOI TYNFOI TYNFOI TYNFOI TYNFOI TYNFOI TYNFOI TYNFOI TYNFOI TYNFOI	The second s	Nations/legislation specific for the state   Nations/legislations Nations   Nations Nations   Nations Nations   Nations Nations   Nations Nations	1 1	1 1	1 1	And A

Substance is not listed.

TSCA (Toxic Substances Control Act):

Substance is listed.

		1			1 + 1			1.1.1		
Proposition 65		1			1		÷.	·		1
Chemicals known to cau										
Substance is not listed.			· · '							
Chemicals known to cau										
Substance is not listed.							. 11			
Chemicals known to cau	ise reproductiv	e toxicit	y for ma	ales:	·			1		Ξ.
Substance is not listed.			'			'				:
Chemicals known to cau				ı						
Substance is not listed.			1			:		111	:	
Carcinogenic categories	;									,
EPA (Environmental Pro	otection Agency	/)			1		÷.,	1		1
Substance is not listed.		г г 1	<sup>1</sup>	1		<sup>1</sup>	1	н н н		
TLV (Threshold Limit Va	lue established	d by AC	GIH)							
Substance is not listed.		; • •						111		
NIOSH-Ca (National Ins	titute for Occup									
GHS label elements				· .			· .			
The substance is classif	ied and labeled	accord	ling to t	he Globa	ally Harm	onized	System	(GHS).		-
Hazard pictograms										
GHS07										
Signal word Warning		1			1		÷.	·		1
Hazard-determining con	nponents of lab	eling:								
Lutetium(III) acetate hyd	Irate (99.9%-Lu	ı) (REO	)	1						
Hazard statements										
H315 Causes skin irritat	ion.									
H319 Causes serious ey	e irritation.	·			·			·		÷.
H335 May cause respira	atory irritation.									:
Precautionary statement	ts	r		ı						
P101 If medical advice is	s needed, have	e produc	t conta	iner or la	abel at ha	ind.			1	
P102 Keep out of reach	of children.									
					· · · ·					
P103 Read label before	use.						· .			

P262 Do not get in eyes, on skin, or on clothing.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if

present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.