

SAFETY DATA SHEET

Revis	sion Date	18-Feb-20	20				Revision	Number 2	
				1 1		1 1			

										_ 111
		1.	Ident	ificatio	n				·	
Product Name	Lithi	ium çoba	alt (III) o	xide						
CAS-No Synonyms	• •	0-79-3 formation a	vailable	. 11	1.		. 11	1.		
Recommended Use Uses advised against		ratory chen , drug, pest		ocidal prod	uct use.	le.		:	le.	
Details of the supplier of the safe	ety data s	heet			1.					
Company										
Stanford Advanced Materials Address : 23661 Birtcher Dr., Lake Forest, CA 92630 U.S.A. Tel: (949) 407-8904 Fax: (949) 812-6690	14		::	14	11	н н н н	14			
Email: sales@samaterials.com		:	1.		:	1.		:**	1	
www.samaterials.com										
Emergency Telephone Number (949) 407-8904		100			1.1		111	1.		
(This telephone number is available	e 24 hours	s per day, 7	days per	week.)						
		2. Haza	rd(s)	identifi	cation	1 1	1 - 1		1 1	

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

					÷						
. :	Carcinogenici Reproductive		14		ie.	 Category 1B Category 2		14		(e	
	Label Elemen	<u>its</u>									_
	Signal Word Danger				11				:•:		 . · :
	Hazard Stater May cause ca Suspected of o	ncer	fertility	11		 	;				
. :		1.1									 111

	Lithium cobalt (III) oxide	1. I					 Revisi	on Date	18-Feb-2020	
				1.1		÷.		' -}		
				:•:		;	 ::. :			: : : .
; • •	Precautionary Statements Prevention					1	 	1		
	Obtain special instructions before Do not handle until all safety preca		been read	d and under	rstood					
	Use personal protective equipmen Response IF exposed or concerned: Get med		11							
	Storage Store locked up									
	Dispose of contents/container to a Hazards not otherwise classifier		aste disp	osal plant		:	11	; · ·	ΕĊ	
	None identified					i.e		1.		

3. Composition/Information on Ingredients

 $(\mathbf{r}_{1},\mathbf{r}_{2}) \in \mathbb{R}^{n}$

Component			CAS-No			W	eight %	
Cobaltate (CoO21-), lith	lium		12190-79-3	3		<	<=100	
	4. F	irst-aid	measu	ires			1 - 1 - 1 1	
General Advice	If symptoms pe	ersist, call a	physician.					
Eye Contact	Rinse immedia medical attenti		nty of water	r, also unde	er the eye	lids, for at l	east 15 min	utes. Get
Skin Contact	Wash off imme call a physiciar		plenty of wa	ater for at le	east 15 m	inutes. If sk	in irritation	persists,
Inhalation	Remove to free symptoms occ		breathing, g	give artificia	l respirati	on. Get me	dical attenti	on if
Ingestion	Clean mouth w symptoms occ		d drink afte	rwards pler	ity of wate	er. Get med	lical attentic	on if
Most important symptoms and effects	None reasonal	oly foreseea	ble.	111	;••		111	: • •
Notes to Physician	Treat symptom	atically		1.1	1,1		1.1	
	5. Fire	e-fightir	ng mea					
			0					
Suitable Extinguishing Media	Not combustib	le.	11.	: • •	1.1	11.	:	1.1
Unsuitable Extinguishing Media	No information	available						
Flash Point Method -	No information No information				:		le:	
an ta ta	1. T.I.	1.1	1.	1.1	• . •	1.	1.1	• . •

Lithium cobalt (III) oxic	de la la				111		Revi	sion Date	18-Feb-2020
Autoignition Temperature Explosion Limits		information av data available		.:•	14	1 1 1 1 1			
Upper Lower		data available							
Sensitivity to Mechan Sensitivity to Static D	iical Impact No i Discharge No i	information av information av	ailable ailable	11.	:		<u>.</u>	:	
Specific Hazards Arising Keep product and empty co			ources of ig	gnition.					
Hazardous Combustion F Lithium oxide. Cobalt oxide						111		19	
Protective Equipment and As in any fire, wear self-con protective gear.				mand, MS	HA/NİÓSH	(approved	d or equi	valent) and	full
NFPA Health	F	Flammability		i.	nstability	1.1	P	hysical ha	zards
	6.	Acciden	tal rele	ease <mark>n</mark>	neasure	s			
Personal Precautions		ure adequate	ventilation.	Use pers	onal protect	ive equip	ment as	required. A	void dust
Environmental Precaution		nation. ould not be rele	eased into t	the enviro	nment. See	Section 1	2 for add	ditional Eco	logical
	Info	rmation. Do no	ot allow ma	terial to c	ontaminate				
1.1 I.	surf	ace water or s	sanitary sev	ver systen	n.				
		eep up and she tainers for disp		iitable cor	ntainers for c	lisposal. I	Keep in s	suitable, clo	sed
Methods for Containment Up		tainers for disp	posal.			lisposal. I	Keep in s	suitable, clo	sed
Up	con	tainers for disp 7. Hand	posal. dling ai	nd sto	rage	1 1 1 1			1 1 1 1 1 1
Up Handling	con Wea inge	7. Hand ar personal pro- estion and inha	posal. dling al otective equ alation. Avo	nd sto uipment/fa bid dust fo	ace protectic rmation. Do	on. Ensure not get ir	e adequa eyes, o	ate ventilatio n skin, or or	on. Avoid n clothing.
Up	Con Wea inge Stor	7. Hand	posal. dling al otective equ alation. Avo ert atmosph	nd sto uipment/fa bid dust fo here. Keep	ace protectic rmation. Do	on. Ensure not get ir	e adequa eyes, o	ate ventilatio n skin, or or	on. Avoid n clothing.
Up Handling	con Wea inge Stor plac	The second secon	posal. dling an otective equ alation. Avo ert atmosph m moisture.	nd sto uipment/fa bid dust fo nere. Keep	prage ace protectic rmation. Do p container f	on. Ensure not get ir tightly clo	e adequa eyes, o sed in a	ate ventilatio n skin, or or	on. Avoid n clothing.
Up Handling	con Wea inge Stor plac	7. Hand ar personal pro- estion and inha- re under an inc	posal. dling an otective equ alation. Avo ert atmosph m moisture.	nd sto uipment/fa bid dust fo nere. Keep	prage ace protectic rmation. Do p container f	on. Ensure not get ir tightly clo	e adequa eyes, o sed in a	ate ventilatio n skin, or or	on. Avoid n clothing.
Up Handling Storage Exposure Guidelines	Wea inge Stor plac 8. Expo	7. Hand 7. Hand ar personal pro- estion and inhat re under an ind ce. Protect fror SURE CON	posal. dling an otective equ alation. Avo ert atmosph m moisture.	nd sto uipment/fa bid dust fo here. Keep persol	prage ace protection rmation. Do po container to nal prot	on. Ensure not get ir tightly clos	e adequa eyes, o sed in a	ate ventilation n skin, or or dry and wel	on. Avoid n clothing. I-ventilated
Up Handling Storage	con Wea inge Stor plac	7. Hand 7. Hand ar personal pro- estion and inha re under an ind ce. Protect fror SURE CON	posal. dling an otective equ alation. Avo ert atmosph m moisture.	nd sto uipment/fa bid dust fo here. Keep persol	prage ace protection rmation. Do po container to nal prot	on. Ensure not get ir tightly clo	e adequa eyes, o sed in a	ate ventilatio n skin, or or	on. Avoid n clothing. I-ventilated
Up Handling Storage Exposure Guidelines	Wea inge Stor plac 8. Expo	7. Hand 7. Hand ar personal pro- estion and inha re under an ind ce. Protect fror SURE CON	posal. dling an otective equ alation. Avo ert atmosph m moisture.	nd sto uipment/fa bid dust fo here. Keep persol	prage ace protection rmation. Do po container to nal prot	on. Ensure not get ir tightly clos	e adequa eyes, o sed in a	ate ventilation n skin, or or dry and wel	on. Avoid n clothing. I-ventilated
Up Handling Storage Exposure Guidelines	Wea inge Stor plac 8. Expo	7. Hand 7. Hand ar personal pro- estion and inha re under an ind ce. Protect fror SURE CON	posal. dling an otective equ alation. Avo ert atmosph m moisture.	nd sto uipment/fa bid dust fo here. Keep persol	prage ace protection rmation. Do po container to nal prot	on. Ensure not get ir tightly clos	e adequa eyes, o sed in a	ate ventilation n skin, or or dry and wel	on. Avoid n clothing. I-ventilated
Up Handling Storage Exposure Guidelines Cobaltate (CoO21-), lithium	Wea inge Stor plac 8. Expo	7. Hand 7. Hand ar personal prostion and inhate re under an indice. Protect from Sure con y g/m³	posal. dling an otective equ alation. Avo ert atmosph m moisture. htrols / OSHA P	nd sto uipment/fa bid dust fo here. Keep persoi	prage ace protection rmation. Do po container to nal prot	on. Ensure not get in tightly close ection <u>SH IDLH</u>	e adequa eyes, o sed in a	ate ventilation n skin, or or dry and wel	on. Avoid n clothing. I-ventilated
Up Handling Storage Exposure Guidelines Cobaltate (CoO21-), lithium Legend	Wea inge Stor plac 8. Expo ACGIH TL TWA: 0.02 m	7. Hand 7. Hand ar personal prostion and inhate re under an indice. Protect from Sure con y g/m³	posal. dling al otective equ alation. Avo ert atmosph m moisture. htrols / OSHA P	nd sto uipment/fa bid dust fo here. Keep persoi	prage ace protectic rmation. Do p container to nal prot	on. Ensur not get in ightly clos ection <u>SH IDLH</u>	e adequa eyes, o sed in a	ate ventilation n skin, or or dry and wel	on. Avoid n clothing. I-ventilated
Up Handling Storage Exposure Guidelines Cobaltate (CoO21-), lithium Legend ACGIH - American Conference	wea inge Stor plac 8. Expo ACGIH TL TWA: 0.02 m e of Governmental	7. Hand 7. Hand ar personal prostion and inhated re under an index. Protect from SUPE CON y g/m³ Industrial Hygic	posal. dling al otective equ alation. Avo ert atmosph m moisture. htrols / OSHA P	nd sto uipment/fa bid dust fo here. Keep persoi	prage ace protectic rmation. Do p container to nal prot	on. Ensur not get in ightly clos ection <u>SH IDLH</u>	e adequa eyes, o sed in a	ate ventilation n skin, or or dry and wel	on. Avoid n clothing. I-ventilated
Up Handling Exposure Guidelines Component Cobaltate (CoO21-), lithium Legend ACGIH - American Conference Engineering Measures	wea inge Stor plac 8. Expo ACGIH TL TWA: 0.02 m e of Governmental Ens pment	The second se	posal. dling al otective equalation. Avo ert atmosph m moisture. htrols / OSHA P enists ventilation,	nd sto uipment/fa bid dust fo here. Keep persor PEL especiall eyeglasse	y in confined	on. Ensur not get in ightly clos ection <u>SH IDLH</u> d areas.	e adequa i eyes, o sed in a n	ate ventilation n skin, or or dry and wel <u>Mexico OI</u> TWA: 0.0	on. Avoid n clothing. I-ventilated <u>EL (TWA)</u> 2 mg/m ³
Up Handling Exposure Guidelines Component Cobaltate (CoO21-), lithium Legend ACGIH - American Conference Engineering Measures Personal Protective Equi	wea inge Stor plac 8. Expo ACGIH TL TWA: 0.02 m e of Governmental Ens pment Wea OSH	The second se	posal. dling al otective equalation. Avo ert atmosph m moisture. htrols / OSHA P enists ventilation, protective of face protective	nd sto uipment/fa bid dust fo here. Keep persor PEL especiall eyeglasse tion regula	y in confined es or chemic ations in 29	on. Ensur not get in ightly close ection <u>SH IDLH</u> d areas.	e adequa i eyes, o sed in a n n	ate ventilation n skin, or or dry and wel <u>Mexico OI</u> TWA: 0.0	on. Avoid n clothing. I-ventilated <u>EL (TWA)</u> 2 mg/m ³
Up Handling Exposure Guidelines Component Cobaltate (CoO21-), lithium Legend ACGIH - American Conference Engineering Measures Personal Protective Equi Eye/face Protection	wea inge Stor plac 8. Expo ACGIH TL TWA: 0.02 m e of Governmental Ens pment Wea OSH EN1	7. Hand 7. Hand ar personal prostion and inhated in the set of	posal. dling al otective equalation. Avo ert atmosph m moisture. htrols / OSHA P enists ventilation, protective of face protective	nd sto uipment/fa bid dust fo here. Keep person PEL especiall eyeglasse tion regula	y in confined es or chemic ations in 29 d clothing to	on. Ensure not get in ightly close ection <u>SH IDLH</u> d areas. al safety CFR 1910	e adequa eyes, o sed in a n n goggles 0.133 or skin expe	ate ventilation n skin, or or dry and wel <u>Mexico Ol</u> TWA: 0.0 as describe European S osure.	on. Avoid n clothing. I-ventilated <u>EL (TWA)</u> 2 mg/m ³

Lithium cobalt (III) oxide

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

		9. Phys	sical a	ind c	hemical	propert	ies		111	
Physical State					Solid					
Appearance					No informati	on available				
Odor		1.1			Odorless					
Ddor Threshold					No informati					
oH Malting Daint/Day					No informati No data ava					
Melting Point/Rar					No informati					
Boiling Point/Ran Flash Point	ige				No informati				11	1.1
Evaporation Rate					Not applicab					
Flammability (sol					No informati					
Flammability or e	iu,yasj vnlosive limit	e			No mormau					
Upper				1.1	No data ava	ilable '	1.1	11.		1.1
Lower					No data ava		1.1			
Vapor Pressure					No informati		1			
Vapor Density					Not applicab					
Specific Gravity			1.1		No informati	on available			1.1	
Solubility					No informati					
Partition coefficie	ent: n-octanol	/water			No data ava					
Autoignition Tem					No informati					
Decomposition T					No informati				11	1.1
Viscosity					Not applicab					
Molecular Formu	la				LiCoO2					
Molecular Weight					97.88					
		1(). Stab	bility	and read	ctivity				
Reactive Hazard		None k	nown has	ed on ir	formation ava	ailabla				
			nown, bac		ionnation ave		: * *			
Stability		Hygros	copic.							
,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
Conditions to Ave	oid	Exposu	re to mois	t air or v	vater.	1.1	111		1.1	
ncompatible Mat	erials	Oxidizir	ng agent							
Hazardous Decor	nposition Pro	ducts Lithium	oxide, Co	balt oxid	des					
11.		14.	111		14.4	: * *	1.1		÷ · ·	
Hazardous Polym	nerization	Hazard	ous polym	erizatio	n does not oc	cur.		-		
Hazardous React	ions	None u	nder norm	al proce	ssing.					
		11.	Toxic	ologi	cal infor	mation				
Acute Toxicity	·		14	1,1		1.1	1.1		14	1.1
Product Informat	ion									
Component Infor			50 0		· · ·			1 14	250 Inhalat	
Compor Cobaltate (CoO		LD50 > 50	050 Oral	Rat \		050 Dermal	Rat \		C50 Inhalatio 5.05 mg/L (
	∠1-), iitriium	LD50 > 500	оотнужд (Ral)	LD30 > 2	ooo mg/kg (Rai)	1000 >	5.05 mg/∟ (r.al) 4 N
	vneraistic	No info	rmation av	/ailable	<u> </u>					
Foxicologically S	,									
Toxicologically S Products			nronic eff	ects fro	m short and	long-term	exposur	е		
Products	ediate effects	o as well as ci					111			
	ediate effects									
Products	ediate effects		rmation av	/ailable						
Products Delayed and imm	ediate effects			/ailable						

Lithium cobalt (III) oxide

Revision Date 18-Feb-2020

arcinogenicity		The table below ir	ndicates whether ea	ach agency ha	s listed	any ingredien	t as a car	cinogen.
Component Cobaltate (CoO21-),	CAS-No 12190-79-3	IARC Not listed	NTP Reasonably	ACGIH A3		OSHA Not listed		exico t listed
lithium		Governmental Industr	Known - Kr Reasonably Carcinogen	 onal Toxicity Pro nown Carcinogel y Anticipated - R n Human Carcine	n Reasonab	ly Anticipated to	o be a Hun	nan [¦] ''
Hygienists)			A2 - Suspe A3 - Anima	cted Human Ca I Carcinogen merican Confere	rcinogen	overnmental In	ndustrial Hv	vaienists)
lutagenic Effects		No information av					adotriar ry	giornolo)
Reproductive Effects		No information av			:•:	;;;,	; · ·	
evelopmental Effec eratogenicity		No information av		14			1	
STOT - single exposi STOT - repeated expo		None known None known						
spiration hazard		No information av						
Symptoms / effects,l lelayed	ooth acute and	No information av	ailable					
indocrine Disruptor	Information	No information av	ailable		11.			11.
Other Adverse Effect	s	The toxicological	properties have no	t been fully inv	restigate	d.	1	
		12. Ecol	ogical infor	mation				
cotoxicity lay cause long-term a	adverse effects				nate gro	und water sys	stem.	141
Persistence and Deg	radability	May persist						
Bioaccumulation/ Ac	cumulation	No information av	ailable.					
Nobility		No information av	ailable.					
		13. Dispo	osal conside					
				termine wheth	or o dioc	orded obomic		
Vaste Disposal Meth	ods	hazardous waste.	enerators must de Chemical waste g s waste regulation	generators mu	st also c	onsult local, r		
Vaste Disposal Meth	ods	hazardous waste. national hazardou	enerators must de Chemical waste g is waste regulation	generators must s to ensure co	st also c	onsult local, r		
	ods	hazardous waste. national hazardou 14. Trar	enerators must de Chemical waste g	generators must s to ensure co	st also c	onsult local, r		
DOT TDG ATA	iods	hazardous waste. national hazardou	enerators must de Chemical waste g is waste regulation	generators must s to ensure co	st also c	onsult local, r		
OT TDG ATA	iods	hazardous waste. national hazardou 14. Trar Not regulated Not regulated Not regulated Not regulated Not regulated	enerators must de Chemical waste g is waste regulation	generators mus s to ensure co mation	st also c	onsult local, r		
Vaste Disposal Meth		hazardous waste. national hazardou 14. Trar Not regulated Not regulated Not regulated Not regulated 15. Regu	enerators must de Chemical waste g is waste regulation	generators mus s to ensure co mation	st also c	onsult local, r		

Lithium cobalt (III) oxide

Revision Date 18-Feb-2020

Component HAPS Data Class 1 Ozone Depletors Class 2 Ozone Depletors Cobaltate (CoO21-), lithium X - - OSHA - Occupational Safety and Health Administration Not applicable - - CERCLA Not applicable - - - California Proposition 65 This product does not contain any Proposition 65 chemicals. - U.S. State Right-to-Know Regulations Massachusetts New Jersey Pennsylvania Illinois Rhode Island Cobaltate (CoO21-), Ithium - X X X - - U.S. Department of Transportation Reportable Quantity (RQ): N N -	Component		CAS-No		TSCA	TSC	A Inventor Active/I	y notificati nactive	on '-'	TSCA - EPA Flag	
TSCA - Toxic Substances Control Act, (40 CFR Part 710) Y - Listed TSCA 12(b) - Notices of Export Not applicable International Inventories Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL). Component CAS-No DSL NDSL EINECS AICS IECSC KE-06111 US. Federal Regulations SARA 313 Component CAS-No Weight % SARA 313 - Threshold Values % Cobalitate (CoO21-), lithium 12190-79-3 <=100 0.1 SARA 311/312 Hazard Categories See section 2 for more information 0.1 Cobalitate (CoO21-), lithium 12190-79-3 <=100 0.1 SARA 311/312 Hazard Categories See section 2 for more information 0.1 CMA (Clean Water Act) Not applicable Class 1 Ozone Depletors Class 2 Ozone Depletors Cobalitate (CoO21-), lithium X Image: Coo21 - Coo21	Cobaltate (CoO21-), lith	nium	12190-79-3		Х					-	
Non rule) - Holices of Expention - Holices of Expension Intermational Inventories Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL). Component CAS-No DSL NDSL EINECS PICCS ENCS AICS IECSC KECL Cobalitate (CoO21-), lithium 12190-79-3 X - 235-362-0 SARA 313 Component CAS-No Weight % SARA 313 - Threshold Values % Cobalitate (CoO21-), lithium 12190-79-3 <=100 0.1	TSCA - Toxic Substances X - Listed	Control Ac	ct, (40 [°] CFR Par	t 710)		<u>;;;</u> ,			<u>.</u>	:	
Canada (DSL/NDSL), Europe (EINECS/LINCS/INLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL). Component CAS-No DSL INDSL EINECS PICCS ENCS AICS IECSC KECL Cobalitate (CoO21-), lithium 12190-79-3 X - 235-362-0 X X X KE-06111 U.S. Federal Regulations SARA 313 - 235-362-0 X X X KE-061111 U.S. Federal Regulations SARA 313 - 235-362-0 X X KE-061111 U.S. Federal Regulations SARA 313 - - 205-362-0 X X KE-061111 U.S. Federal Regulations SARA 313 - - 208-362-0 - X X KE-061111 U.S. Federal Regulations Cobalitate (CoO21-), lithium 12190-79-3 <=<100	TSCA 12(b) - Notices of	Export	Not app	olicable	111	111	111	111		19	:**
Cobalitate (CoO21-), lithium 12190-79-3 X 235-362-0 X X X K KE-06111 U.S. Federal Regulations SARA 313 Component CAS-No Weight % SARA 313 - Threshold Values % Component CAS-No Weight % SARA 313 - Threshold Values % SARA 311/312 Hazard Categories See section 2 for more information SARA 311/312 Hazard Categories See section 2 for more information Component HAPS Data Class 1 Ozone Depletors Class 2 Ozone Depletors Cobalitate (CoO21-), lithium X Image: Class 1 Ozone Depletors Class 2 Ozone Depletors Cobalitate (CoO21-), lithium X Image: Class 1 Ozone Depletors Class 2 Ozone Depletors Cobalitate (CoO21-), lithium X Image: Class 1 Ozone Depletors Class 2 Ozone Depletors Cobalitate (CoO21-), lithium X Image: Class 1 Ozone Depletors Image: Class 1 Ozone Depletors Class 1 Ozone Depletors			CS/ELINCS/NLF	²), Philippin	es (PICCS)), Japan (ENC	S), Australi	a (AICS), C	hina (IEC	SC), Korea (E	ECL).
Cobalitate (CoO21-), lithium 12190-79-3 X 235-362-0 X X X K KE-06111 U.S. Federal Regulations SARA 313 Component CAS-No Weight % SARA 313 - Threshold Values % Component CAS-No Weight % SARA 313 - Threshold Values % SARA 311/312 Hazard Categories See section 2 for more information SARA 311/312 Hazard Categories See section 2 for more information Component HAPS Data Class 1 Ozone Depletors Class 2 Ozone Depletors Cobalitate (CoO21-), lithium X Image: Class 1 Ozone Depletors Class 2 Ozone Depletors Cobalitate (CoO21-), lithium X Image: Class 1 Ozone Depletors Class 2 Ozone Depletors Cobalitate (CoO21-), lithium X Image: Class 1 Ozone Depletors Class 2 Ozone Depletors Cobalitate (CoO21-), lithium X Image: Class 1 Ozone Depletors Image: Class 1 Ozone Depletors Class 1 Ozone Depletors	Component		CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
U.S. Federal Regulations SARA 313 Component CAS-No Weight % SARA 313 - Threshold Values % Cobaltate (CoO21-), lithium 12190-79-3 <=100		nium					-	Х			KE-06111
Cobaltate (CoO21-), lithium 12190-79-3 <=100	SARA 313			,	CAS-	No	N	/eight %			
SARA 311/312 Hazard Categories See section 2 for more information CWA (Clean Water Act) Not applicable Clean Air Act Class 1 Ozone Depletors Cobaltate (CoO21-), lithium X AC Occupational Safety and Health Administration Not applicable CERCLA Not applicable California Proposition 65 This product does not contain any Proposition 65 chemicals. U.S. State Right-to-Know Regulations Mew Jersey Pennsylvania Component Massachusetts New Jersey U.S. Department of Transportation Reportable Quantity (RQ): N DOT Marine Pollutant N V.S. Department of Homeland Security This product does not contain any DHS chemicals.					40400	70.0		. 100			
CWA (Clean Water Act) Not applicable Clean Air Act HAPS Data Class 1 Ozone Depletors Class 2 Ozone Depletors Cobaltate (CoO21-), lithium X - - OSHA - Occupational Safety and Health Administration Not applicable - - CERCLA Not applicable - - - California Proposition 65 This product does not contain any Proposition 65 chemicals. - U.S. State Right-to-Know Regulations Massachusetts New Jersey Pennsylvania Illinois Rhode Island Cobaltate (CoO21-), inthium X X X - - U.S. State Right-to-Know Regulations - - X X - U.S. Department of Transportation Reportable - - - - - U.S. Department of Transportation Reportable Quantity (RQ): N - - - - U.S. Department of Homeland Security No - - - - - - - - - - - - - - - - - - -		<u>50021-),</u>	lithium		12190-	19-3		<=100		0.1	
Cobaltate (CoO21-), lithium X - OSHA - Occupational Safety and Health Administration Not applicable - CERCLA Not applicable - California Proposition 65 This product does not contain any Proposition 65 chemicals. U.S. State Right-to-Know Regulations - Component Massachusetts New Jersey Pennsylvania Illinois Rhode Island Cobaltate (CoO21-), Ithium X X X - - U.S. Department of Transportation No No - - - - U.S. Department of Transportation N DOT Marine Pollutant N -	CWA (Clean Water Act))	Not app	olicable							
OSHA - Occupational Safety and Health Administration Not applicable CERCLA Not applicable California Proposition 65 This product does not contain any Proposition 65 chemicals. U.S. State Right-to-Know Regulations Massachusetts New Jersey Component Massachusetts New Jersey Cobaltate (CoO21-), Iithium - X X U.S. Department of Transportation Reportable Quantity (RQ): N DOT Marine Pollutant N U.S. Department of Homeland Security This product does not contain any DHS chemicals. Mexico - Grade No information available		nt	1 1 1 1	HAPS)ata	Class	1 Ozone [Depletors	Clas	ss 2 Ozone D	Depletors
California Proposition 65 This product does not contain any Proposition 65 chemicals. U.S. State Right-to-Know Regulations Regulations Component Massachusetts New Jersey Pennsylvania Illinois Rhode Island Cobaltate (CoO21-), lithium - X X X - U.S. Department of Transportation Reportable Quantity (RQ): N DOT Marine Pollutant N DOT Severe Marine Pollutant N Dot contain any DHS chemicals. U.S. Department of Homeland Security This product does not contain any DHS chemicals. Mexico - Grade No information available	Componer		1		Data	Class	1 Ozone E	Depletors	Clas	ss 2 Ozone D	Depletors
U.S. State Right-to-Know Regulations Massachusetts New Jersey Pennsylvania Illinois Rhode Island Cobaltate (CoO21-), lithium X X X X - U.S. Department of Transportation Reportable Quantity (RQ): N - - - DOT Marine Pollutant N - - - - U.S. Department of Homeland DOT Severe Marine Pollutant N - - - Mexico - Grade No information available - - - -	Componer Cobaltate (CoO21 OSHA - Occupational Sa Health Administration	-), lithium	Not app	X	Data	Class	1 Ozone E	Depletors		- 19	
Cobaltate (CoO21-), lithium - X X X X X - U.S. Department of Transportation Reportable Quantity (RQ): N N - - X X X -	Componer Cobaltate (CoO21 OSHA - Occupational Sa Health Administration	-), lithium	Not app	X)ata		1 Ozone E	Depletors		- 19	
lithium Ithium U.S. Department of Transportation Reportable Quantity (RQ): N DOT Marine Pollutant N DOT Severe Marine Pollutant N U.S. Department of Homeland This product does not contain any DHS chemicals. Security Other International Regulations Mexico - Grade No information available	Componer Cobaltate (CoO21 OSHA - Occupational Sa Health Administration CERCLA California Proposition U.S. State Right-to-Kno Regulations	-), lithium afety and 65 ow	Not app Not app This pro	X Dicable Dicable oduct does	s not conta	ain any Prop	osition 65	chemicals			
U.S. Department of Transportation Reportable Quantity (RQ): N DOT Marine Pollutant N DOT Severe Marine Pollutant N U.S. Department of Homeland This product does not contain any DHS chemicals. Security Other International Regulations Mexico - Grade No information available	Cobaltate (CoO21 OSHA - Occupational Sa Health Administration CERCLA California Proposition U.S. State Right-to-Kno Regulations Component	-), lithium afety and 65 ow	Not app Not app This pro	X Dicable Dicable oduct does	s not conta	ain any Prop	osition 65 ylvania	chemicals	nois		
Security Other International Regulations Mexico - Grade No information available	Componer Cobaltate (CoO21 OSHA - Occupational Sa Health Administration CERCLA California Proposition U.S. State Right-to-Kno Regulations Component Cobaltate (CoO21-),	-), lithium afety and 65 ow	Not app Not app This pro	X Dicable Dicable oduct does	s not conta	ain any Prop	osition 65 ylvania	chemicals	nois		
Mexico - Grade No information available	Componer Cobaltate (CoO21 OSHA - Occupational Sa Health Administration CERCLA California Proposition U.S. State Right-to-Kno Regulations Component Cobaltate (CoO21-), lithium U.S. Department of Tra Reportable Quantity (RC DOT Marine Pollutant	-), lithium afetý and 65 ow Mas ansportat	Not app Not app This pro	X Dicable Dicable oduct does	s not conta Jersey X	ain any Prop	osition 65 ylvania	chemicals	nois X	Rhod	le Island
	Componer Cobaltate (CoO21 OSHA - Occupational Sa Health Administration CERCLA California Proposition U.S. State Right-to-Kno Regulations Component Cobaltate (CoO21-), lithium U.S. Department of Tra Reportable Quantity (RC DOT Marine Pollutant DOT Severe Marine Poll	-), lithium afety and 65 ow Mas ansportat 2): lutant	Not app Not app This pro seachusetts tion N N N	X Dicable Dicable Dicable Dicable	s not conta Jersey X	ain any Prop	osition 65 ylvania <	chemicals	nois X	Rhod	le Island
a la	Componer Cobaltate (CoO21 OSHA - Occupational Sa Health Administration CERCLA California Proposition U.S. State Right-to-Kno Regulations Component Cobaltate (CoO21-), lithium U.S. Department of Tra Reportable Quantity (RC DOT Marine Pollutant DOT Severe Marine Poll U.S. Department of Hor Security	-), lithium afetý and 65 ow Mas ansportat 2): lutant meland	Not app Not app This pro seachusetts tion N N N This pro	X Dicable Dicable oduct does New	s not conta Jersey X	ain any Prop	osition 65 ylvania	chemicals	nois X	Rhod	le Island
	Componer Cobaltate (CoO21 OSHA - Occupational Sa Health Administration CERCLA California Proposition U.S. State Right-to-Kno Regulations Component Cobaltate (CoO21-), lithium U.S. Department of Tra Reportable Quantity (RC DOT Marine Pollutant DOT Severe Marine Poll U.S. Department of Hor Security	-), lithium afetý and 65 ow Mas ansportat 2): lutant meland	Not app Not app This pro seachusetts tion N N This pro s No info	X Dicable Dicable oduct does New	s not conta Jersey X s not conta	ain any Prop	osition 65	chemicals	nois X		le Island
	Componer Cobaltate (CoO21 OSHA - Occupational Sa Health Administration CERCLA California Proposition U.S. State Right-to-Kno Regulations Component Cobaltate (CoO21-), lithium U.S. Department of Tra Reportable Quantity (RC DOT Marine Pollutant DOT Severe Marine Poll U.S. Department of Hor Security Other International Reg Mexico - Grade	-), lithium afety and 65 ow Mas ansportat 2): lutant meland gulations	Not app Not app This pro seachusetts tion N N This pro s No info	X Dicable Dicable oduct does New	s not conta Jersey X s not conta	ain any Prop	osition 65	chemicals	nois X		le Island

and age that are any the are the

	Lithium cobal	t (III) ox	xide							Revisio	on Date 18	8-Feb-202
				1 1 1 1 1 1 1			nformat			1 1 1 1 1 1 1		
	Prepared By				n, Safety ar : sales@sa		nmental Dep .com	partment				
	Revision Date Print Date Revision Summ	nary	:•:	18-Fe 18-Fe	samaterials b-2020 b-2020		1 + + - + + 	;		;::		:•:
. :	Disclaimer		ini Ind in thi				odate, replac					et the
	The information date of its publi transportation, relates only to to materials or in a	ication. disposa the spec	The info al and rel cific mate	rmation giv lease and is erial design	ven is design s not to be nated and r	gned onl conside nay not b	y as a guida red a warra	ance for sa nty or qua	ife handli lity speci	ng, use, pi fication. Th	ocessing, ne informa	storage, tion
		;	:•:		;	End o	f SDS	;	:•:		;	:•:
. :	11	:•:	; · ¹			;;;			;	:::		;;;i
	38		• • •			141			111			141
	100	;			;••	:•;	111	;••				
.:		l.	: · ·		11:		:::	1.1	; ¹	:::	111	:+ ¹
		1:1	11		1 1 1 1 1 1	141					` ::	1×1
	19	:	:.:						:-:			:•:
		l.	; · i	::: :::		; · ¹			;•1	:::		;••
• • •		` ::				:::						141
	;::	;···	:•:		:	:•:		:	:•:		:	:•:
;.;		le:			14	:+ ¹		111	;. ¹		1.	
• • •												
						Page	7/7					
		:		• : :								1.1