

SAFETY DATA SHEET

					111				Date	Accessed	d: 25/08	8/2023
1 1		t.	1		l'	1		i.	Dat	e Revised	d: 04/11	/2022
										: .	.:	
	ECTION 1. IDENTIFICATION roduct Name: Neodymium Hydroxide AS #: 16469-17-3 elevant identified uses of the substance: Scientific research and development upplier details: tanford Advanced Materials -mail: sales@samaterials.com el: (949) 407-8904 ddress: 23661 Birtcher Dr., Lake Forest, CA 92630 U.S.A. ECTION 2. HAZARDS IDENTIFICATION lassification of the substance or mixture HS Classification in accordance with 29 CFR 1910 (OSHA HCS) kin corrosion(Category 1B), H314 erious eye damage(Category 1), H318 HS Label elements, including precautionary statements ictogram ignal word		: * *	1								
	Control of the substance or mixture Control of the substance or mixture CAS SI CONTROL OF THE SUBSTANCE OF		t.	1								
Relev	ant ident	tified us	ses of t	he subs	tance: S	Scienti	fic resea	rch and	develo	opment	.:	
Supp	lier detai	ls:										
Stanfo	ord Advar	nced Ma	terials		; • •	1						
E-mai	il: sales@	samate	rials.co			,						
Tel: (9	949) 407-	8904	1.1	14	1	1.1		:	1.1	1. 1.	1	1
SEC	CTION	2. H	AZAI	RDS I	DENI	FIFIC		N	1			1
SEC Class	CTION	2. H	AZAI	RDS I	DEN1	ΓIFIC		N			: ::	1) 11
SEC Class GHS	CTION ification o Classifica	2. H f the su tion in a	AZAI bstance accorda	RDS I e or mixtu nce with	DEN1	ΓIFIC		N			: ::	1) 11
SEC Class GHS Skin c	CTION ification o Classifica corrosion(2. H f the su tion in a Categor	AZAI bstance iccorda ry 1B), 1	RDS I e or mixtu nce with H314	DEN1 ure 29 CFR	TIFIC	ATIO OSHA H	N ICS)				13 1
SEC Class GHS Skin o Serior	CTION ification o Classifica corrosion(us eye da	2. H f the su tion in a Categor mage(C	AZAI bstance iccorda ry 1B), category	RDS I e or mixtu nce with H314 y 1), H31	DEN1 ure 29 CFR	TIFIC 1910 (ATIO OSHA H	N ICS)				13 1
SEC Class GHS Skin c Seriou GHS	CTION ification o Classifica corrosion(us eye da Label elei	2. H f the su tion in a Categor mage(C ments, i	AZAI bstance iccorda ry 1B), category ncludin	RDS I e or mixtu nce with H314 y 1), H31 g precau	DEN1 ure 29 CFR 8	TIFIC 1910 (ATIO	N ICS)				
SEC Class GHS Skin c Seriou GHS Pictog	CTION ification o Classifica corrosion(us eye da Label elei gram	2. H f the su tion in a Categor mage(C ments, i	AZAI bstance iccorda ry 1B), I category ncludin	RDS I e or mixtu nce with H314 y 1), H31 g precau	DEN1 ure 29 CFR 8 tionary s	TIFIC 1910 (ATIO	N (CS)				
SEC Class GHS Skin o Serior GHS Pictog Signa	CTION ification o Classifica corrosion(us eye da Label eler gram I word	2. H f the su tion in a Categor mage(C ments, i	AZAI bstance iccorda ry 1B), I category ncludin	RDS I e or mixtu nce with H314 y 1), H31 g precau	DEN1 ure 29 CFR 8 tionary s	TIFIC 1910 (ATIO	N (CS)				
SEC Class GHS Skin c Seriou GHS Pictog Signa Dange	CTION ification o Classifica corrosion(us eye da Label eler gram I word er	2. H f the su tion in a Categor mage(C ments, i	AZAI bstance iccorda ry 1B), I category ncludin	RDS I e or mixtu nce with H314 y 1), H31 g precau	DEN1 ure 29 CFR 8 tionary s	TIFIC 1910 (stateme	ATIO	N (CS)				

	· · · · · ·		1			1				
Causes severe skin bu	urns and ey	e damage.	1	1. 1.		·	1. 1.		1	1
Precautionary stateme										
P260										
Do not breathe dust or										
P264				. * *						
Wash skin thoroughly	after handli	ing.P280	1.0	1. 1.		1	1. 1.	t.	1	1
Wear protective gloves	s/ protective	e clothing/ e	ye prote	ction/ fac	e protecti	on.	:			
P301 + P330 + P331										
IF SWALLOWED: rins	e mouth. D	o NOT indu	ce vomit	ing.						
P303 + P361 + P353			ï	ı		1				
IF ON SKIN (or hair): F	Remove/ Ta	ake off imme	ediately a	all contar	minated c	lothing	. Rinse sl	kin with	1	1.
water/				÷.						:
shower.										
P304 + P340										
IF INHALED: Remove	victim to fro	esh air and	keep at r	rest in a l	position c	omforta	able for b	reathing		
P305 + P351 + P338		·. :'	1			1			1.0	1.
IF IN EYES: Rinse cau	utiously with	n water for s	everal m	ninutes. F	Remove c	ontact	lenses, if	present	and	:
easy to do. Continue r	insing.									
P310								: • •		
Immediately call a PO	ISON CEN	TER or doct	or/ physi	cian.						
P321	1	n ei	`			<u>.</u>			1 	· .
Specific treatment (see	e suppleme	ental first aid	instructi	ions on t	his label).					:
P363										
Wash contaminated cl	othing befo	re reuse.	:					111		. '
P405	·	· · · · ·	1	Ч.		·				
Store locked up.							1			
P501										:
Dispose of contents/ c				-	-					
Hazards not otherwise	classified	(HNOC) or r	not covei	red by G	HS-none		. 11			. '

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substanc	es			.:			.:			.1		
Formula:	H3NdO3											
Molecula	r Weight: 19	5.26 g/m	nol		1			1			`: 	
CAS-No::	16469-17-3	3 , ,	1.	1	1	1. 1.		1			1	
EC-No.: 2	240-514-4			, i		÷.,	.1		÷.	j)		

SECTION 4. FIRST AID MEASURES

Description of first aid measures General advice Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician. In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital. If swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayedThe most important known symptoms and effects are described in the labelling (see section 2) and/or

in section 11

Indication of any immediate medical attention and special treatment needed

no data available	1		e ^r	5	14. 1	:	1	14. 19	:	1	• ,
						.:			į.		
SECTION 5. F	IREF	IGHTI	NG N	IEAS	SURE	S					
Extinguishing media		1 1 1		1		1 - 1 - 1 1		19			. '
Suitable extinguishin	g media	14. 14.	ť	1	14	l'	1		: É	1 1	
Use water spray, alc	ohol-resi	stant foar	n, dry cl	nemical	l or carbo	on dioxid	е.				
Special hazards arisi	ng from	the subst	ance or	mixture	9						
neodymium oxides Advice for firefighters				1		:		19		1	. '
Wear self contained		n apparat	us for fir	e fiahti	na if nec	essarv.	1		:	1	
		;		-	-	-			:		
no data available					,	,					
	:		1	:	1 - 1 1	1				:	
SECTION 6.		DENT	AL RE	ELEA	SE M	IEASU	JRES	5	:	1	
Personal precautions	s, protect	ive equip	ment ar	id emer	gency p	rocedure	S				
Use personal protect	ive equip	oment. Av	void dus	t forma	tion. Avo	id breath	ing vap	ours, mis	st or gas		
Ensure adequate ver	ntilation.	Evacuate	person	nel to s	afe area	s. Avoid	breathir	ng dust.	111	1	. '
For personal protecti	on see s	ection 8.	: 1	·	1. 1.		1	1. 1.		1	
Environmental preca	utions	;	:		:	:		:	:		

Do not let product enter drains.

Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions f	or safe har	ndling	·		·			1			1	
Avoid formati	on of dust	and ae	rosols.									
Provide appro	opriate exh	aust ve	entilation a	at place	es whe	re dust is	formed	.Norma	l measur	es for		
preventive fire	e protectior	٦.										
For precautio	ns see sec	tion 2.				. * *						
Conditions fo	r safe;stora	age, inc	luding an	y incon	npatibi	lities	:	1	1. 1.	1	1	
Keep contain	er tightly cl	osed ir	n a dry an	d well-v	ventilat	ed place.						
Keep in a dry	place.		· .	, '		· .	, '		· ·			
Specific end	use(s)	·			· .							
Apart from the	e uses mer	ntioned			i						i	
in section 1 n	o other spe	ecific us	ses are st	ipulate	d		:	1			1	
SECTIO	N 8. EX	POS	URE		TRO	LS/PE	RSC	NAL	-			
PROTEC	TION											
Control paran	netersCom	ponent	s with wo	rkplace	e contro	ol parame	ters	1			1	
Contains no s	substances	with o	ccupation	al expo	osure li	mit values	S					
Exposure cor	ntrols											
Appropriate e	engineering	contro	ls					1		111		
Handle in acc	cordance w	ith goo	d industri	al hygie	ene an	d safety p	ractice.	Wash	hands be	efore bre	aks	
and at the en	d of workda	ay.										
Personal prot	ective equi	ipment	1		1.1.1							
Eye/face prot	ection											
Face shield a	nd safety g	glasses	Use equi	pment	for eye	e protectio	n teste	d and a	pproved	under		
appropriate g	overnment	standa	ards such	as:NIC	OSH (U	S) or EN	166(EU).			1	
Skin protectio	on		:	:						:		
Handle with g											/	
technique (wi	thout touch	ning glo	ve's oute	r surfac	ce) to a	void skin	contact	t with th	is produc	ct. Dispo	se of	

contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties													
Appearance	··· ·	:		<u>'</u> .	;		÷.	;					
Form: Powder with lumps				÷.,						:			
Odour													
no data available	:	: • •	1		111	1		111	1				
Odour Threshold			·	·		1			·	•			
no data available													
pH ¹	···			÷.,						:,			
no data available													
Melting point/freezing poir	ht it	111		. * *	111	1		111	1				
no data available				1. 1.		1	14. 14.	÷	1	۰.			
Initial boiling point and boi				:									
no data available	···			<u>'</u> ,			1.						
Flash point not applicable	:		1		1.1.1	1							
Evapouration rate		:	·	14. 14.	e l'	1	14	e la companya de la c	1.1	۰.			
		I		I	I		1	1					

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no data available	1		:	·		:	1.		i.	1	۰.
Flammability (solid, gas)											
no data available								1.			· · ·
Upper/lower flammability	y or ex	plosive lin	nits								
no data available	1		ı				1				
Vapour pressure	1		:	1.1		:	·		÷	1.1	÷.,
no data available		1			1						:
Vapour densityno data a											
Relative density				· ;			· .		; • •		
no data available											
Water solubility	1 			·			· · ·			1 	· · ·
no data available		1			1				.1		÷.
Partition coefficient: n-o	ctanol/	water									
no data available			1 1 1 1				1				. • •
Auto-ignition temperatur		·		·			·			·	
no data available											
Decomposition tempera	ture										
no data available											
Viscosity											
no data available	1		:	1		:	·		:	1	÷.,
Explosive properties											:
no data available			ı			,			,		
Oxidizing properties			1 1 1 1	۰.			· .			· .	
Other safety information	1-144					1	1.1	14	i.	1 	÷.,
no data available			.:		1	.:		1	.:		1

SECTION 10. STABILITY AND REACTIVITY

Reactivity

			1	-	1.1	1.1.1	1				
no data available	н	1. 1.	:	1	1.		1	1. 1.	:	1	÷.,
Chemical stability											
Stable under recom	imended s	torage c	conditions					1			÷.
Possibility of hazard											
no data available							1				
Conditions to avoid	· · · · · ·	14. 19	:	1	1. 1.		1		÷	1	14. 14.
no data available		1	.1			.1					1.
Incompatible materi	ials										
Strong oxidizing ag	ents					; · ·					
Hazardous decomp	osition pro	oducts									
Other decompositio	n products	s-no dat	a available	9	14		1		ť	1	14
In the event of fire:	see sectio	n 5	. ÷			.1					1.
					4				E		÷.

SECTION 11. TO	XICOLO	GIC/		IFORI	ΜΑΤΙΟ	ON			1	
Information on toxicologic	al effects	:	1		:	1	1		1.1	÷.,
Acute toxicity		.:		1	,÷		1	.1		:
no data available										
Inhalation: no data availal	ble	: • •			111	1		111		
Dermal: no data available			·	·		·	·		1	•
no data available										
Skin corrosion/irritation	···									:
no data available										
Serious eye damage/eye	irritation		1		1.1			111	1	
no data available		: '	1. J.	1. 1.		1			1	۰.
Respiratory or skin sensit no data available	isation	.:						.:		1
Germ cell mutagenicityno Carcinogenicity	data available		` ;						`:	
IARC:		:	·		l.				1	÷.,

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: 1

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a												
carcinogen or potential	carcino	ogen by C	SHA.			:	1	14	t.	1		
Reproductive toxicity		1				.:			j.			
no data available												
no data available						; • •			1.1.1			
Specific target organ to												
no data available							1 					
Specific target organ to	xicity -ı	repeated	exposu	re								
no data available												
Aspiration hazard						1.1.1			111			
no data available	·	1.		·	14. 1		1	1. 1.	e.	1		
Additional Information												
RTECS: Not available		1,				.1			.1			
Cough, Shortness of breath, Headache, Nausea, Vomiting												
1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	1		1.1.1				1			1		

SECTION 12. ECOLOGICAL INFORMATION

Toxicity no data available Persistence and degradability no data available Bioaccumulative potential no data available Mobility in soil no data available Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted Other adverse effects

no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped

with an afterburner and scrubber.

Contaminated packagingDispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

DOT (US) UN number: 3262 Class: 8 Packing group: III Proper shipping name: Corrosive solid, basic, inorganic, n.o.s.(Neodymium trihydroxide hydrate) Marine pollutant: No Poison Inhalation Hazard: No IMDG UN number: 3262

Class: 8	·	1. 1.	1	·	14. 14.		·	1. 1.	i.	÷
Packing group: III EMS-No: F-A, S-B		1	. :		1	, i		1.	.÷	
Proper shipping name:	CORR	OSIVE S	OLID, B	ASIC,	INORGA	NIC, N.C	D.S.(Ne	odymiun	n trihydro	xide
hydrate)	1					111	1			1
Marine pollutant: No	1			·	14	÷.	1. J. J.	14	:	1
IATA UN number: 3262		1,				.1		÷.	.1	
Class: 8 Packing group: III			:	1		111	1		:	`:
Proper shipping name:	Corros	ive solid,	basic, i	norgan	ic, n.o.s.(Neodym	ium tril	nydroxide	e hydrate	e)

SECTION 15. REGULATORY INFORMATION

SARA 302 Components	·	· .		·	· .		·	· .					
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III,													
Section 302.		1				.:		1	.1				
SARA 313 Components													
SARA 313: This material	does n	ot contair	n any cl	nemical	compone	ents witl	h knowi	n CAS nui	mbers t	hat			
exceed the threshold (De	Minimi	s) reporti	ng leve	ls estat	lished by	SARA	Title III	, Section 3	313.	·			
SARA 311/312 Hazards													
Acute Health Hazard													
Massachusetts Right To I	Know C	compone	nts										
No components are subje	ect to th	e Massa	chusett	s Right	to Know A	Act.							
Pennsylvania Right To Kr	now Co	mponent	S	1	1.	:	1	1. 1.	:	·			
Neodymium trihydroxide	hydrate	:	:		1	:		:					
New Jersey Right To Kno	W	,	1		,			1					
Components	· .			· .			· .			•			
Neodymium trihydroxide	hydrate						I						
California Prop. 65 Comp	onents			1. 				14. 1		·			

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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. Theinformation 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.

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