

SAFETY DATA SHEET

Creation Date 23-May-2018

Revision Date 31-Mar-2024

Revision Number 3

1. Identification

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Cat No. :

Product Name

CAS No Synonyms 11106-97-1 No information available

Recommended Use Uses advised against

Laboratory chemicals. Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Stanford Advanced Materials Address : 23661 Birtcher Dr., Lake Forest, CA 92630 U.S.A. Tel: (949) 407-8904 Fax: (949) 812-6690

Emergency Telephone Number

(949) 407-8904

(This telephone number is available 24 hours per day, 7 days per week.)

2. Hazard(s) identification

Classification

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

Skin Sensitization Carcinogenicity Category 1 Category 2

Label Elements

Signal Word Warning

Hazard Statements

May cause an allergic skin reaction Suspected of causing cancer

Precautionary Statements							
Prevention						 	
Obtain special instructions before use							
Do not handle until all safety precautions have been read and	unders	stood					
Use personal protective equipment as required Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing should not be allowed out of the v		1		· · · ·		· .	
Avoid breathing dust/fume/gas/mist/vapors/spray		1. C					
Contaminated work clothing should not be allowed out of the v	workpla	ace					
Wear protective gloves							
Response							
IF exposed or concerned: Get medical attention/advice		1				 	
Skin		- 1					
IF ON SKIN: Wash with plenty of soap and water							
If skin irritation or rash occurs: Get medical advice/attention							
Wash contaminated clothing before reuse						 	
Storage							
Store locked up							
Disposal							
Dispose of contents/container to an approved waste disposal	plant	` .	1 I	1	1.		· · ·
Hazards not otherwise classified (HNOC)							
None identified							
WARNING. Cancer - https://www.p65warnings.ca.gov/.							

3. Composition/Information on Ingredients

Component	CAS No	Weight %
Nickel Chromium	11106-97-1	<=100

	4. First-aid measures
General Advice	If symptoms persist, call a physician.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
Most important symptoms and effects	May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
Notes to Physician	Treat symptomatically
	5. Fire-fighting measures

Suitable Extinguishing Media	approved class D extinguishers. Do not use water or foam.
Unsuitable Extinguishing Media	No information available
Flash Point Method -	No information available No information available
Autoignition Temperature Explosion Limits	No information available
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impac	t No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Nickel oxides. Chromium oxide.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Health 2	Flammability 2	Instability 0	Physical hazards -				
	6. Accidental release measures						
Personal PrecautionsEnsure adequate ventilation. Use personal protective equipment as required.Environmental PrecautionsDo not allow material to contaminate ground water system. See Section 12 for Ecological Information.							

Methods for Containment and Clean Pick up and transfer to properly labelled containers. Up

	7. Handling and storage
Handling	Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.
Storage.	Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Acids.

8. Exposure controls / personal protection

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.

Component	ACGIH TLV	OSHA PEL	NIOSH	Mexico OEL (TWA)
Nickel Chromium			IDLH: 10 mg/m ³	
			TWA: 0.015 mg/m ³	

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

Nickel Chromium

	EN166.	
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.	
Respiratory Protection	No protective equipment is needed under normal use conditions.	
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.	
	9. Physical and chemical properties	

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Physical State Appearance		1		Solid Silver					
Odor				Odorless					
Odor Threshold	1		1	No information available	1	1. I.		1	1
рН				No information available					
Melting Point/Range				1400 °C / 2552 °F					
Boiling Point/Range				No information available					
Flash Point				No information available					
Evaporation Rate	1	111		Not applicable	1.1		111		
Flammability (solid,gas)				No information available					
Flammability or explosive limits									
Upper				No data available					
Lower				No data available					
Vapor Pressure				No information available					
Vapor Density				Not applicable					
Specific Gravity			÷.,	No information available	1. C			· · · ·	
Solubility				No information available					
Partition coefficient; n-octanol/w	ater			No data available					
Autoignition Temperature				No information available					
Decomposition Temperature				No information available					
Viscosity				Not applicable					
Molecular Formula	· · ·			Ni:Cr; 80:20 wt%	. '	1.			
		10. Stab	ility	and reactivity					
Reactive Hazard	No	ne known, base	ed on i	nformation available					

Hazardous Reactions	None under normal processing.			1		
Hazardous Polymerization	Hazardous polymerization may occur.	 				
Hazardous Decomposition Prod	ucts Nickel oxides, Chromium oxide	. '	1.		. '	
Incompatible Materials	Acids					
Conditions to Avoid	Incompatible products.					
Stability	Hazardous polymerization may occur.		1		`:	Ξ.

11. Toxicological information

Acute Toxicity

Product Information Component Information							
Toxicologically Synergistic	No information available	1	1	1. I.	1	1	
Products Delayed and immediate effects a			exposure	<u>)</u>			
and the second	and the second						
Irritation	No information available						

Nickel Chromium

Sensitization

May cause sensitization by skin contact

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH		OSHA	Μ	exico
Nickel Chromium	11106-97-1	Not listed	Known	Not listed	1	Not listed	No	t listed
Iutagenic Effects		No information ava	ailable				1	
Reproductive Effects	5	No information ava	ailable.					
Developmental Effect	sts	No information ava	ailable.					
eratogenicity		No information ava	ailable.					
STOT - single expos STOT - repeated exp		None known None known	i i		i			i
Aspiration hazard		No information ava	ailable					
Symptoms / effects lelayed	both acute and	• •	gic reaction may in eet, dizziness, light		•	•		
Endocrine Disruptor	Information	No information ava	ailable					
Other Adverse Effec	ts	The toxicological p	properties have not	been fully in	vestigat	ed.		
		12 Ecol	ogical inform	nation	1			

May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Persistence and Degradability	Insoluble in water May persist
Bioaccumulation/ Accumulation	No information available.
Mobility	Is not likely mobile in the environment due its low water solubility.
	13. Disposal considerations
Waste Disposal Methods	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

DOT Not regulated TDG Not regulated IATA Not regulated IMDG/IMO Not regulated		$(1,1)^{(1)}$	14. Trai	nsport infor	mation		
in bornegalated	OT [DG \TA MDG/IMO	 	Not regulated		1 I 1	 	

15. Regulatory information

United States of America Inventory

	Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Г	Nickel Chromium	11106-97-1	··		

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed '-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Nickel Chromium	11106-97-1	-	-	-	-	-		-	-	-

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	CAS No	Weight %	SARA 313 - Threshold Values %	SARA 313 - Reporting threasholds
Nickel Chromium	11106-97-1	<=100	0.1 %	-

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)	Not applicable			
Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Nickel Chromium	-	-	Х	-

Clean Air Act

Clean Air Act	Not applicable		
Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Nickel Chromium	Х		-
		•	•

OSHA - Occupational Safety and Not applicable Health Administration

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65

This product contains the following Proposition 65 chemicals.

				1.
Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Nickel Chromium	11106-97-1	Carcinogen	-	Carcinogen
U.S. State Right-to-Know	Not applicabl	e		

Regulations

		-	-		
Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Nickel Chromium	-	Х	Х	Х	-

U.S. Department of Transportation

Nickel Chromium						Revision	Date	31-Mar-2024
Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant	N N N	 1	1.			:.		
U.S. Department of Homeland Security			•	IS chemical				
Security		. '	1.		. '	1.		

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	5	Candidate List of Substances of Very High
				Concern (SVHC)
Nickel Chromium	11106-97-1	· _ ·	Use restricted. See item	- '
			27.	
			(see link for restriction	
1	1 I I I	1	details)	I I

REACH links

https://echa.europa.eu/substances-restricted-under-reach

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Nickel Chromium	11106-97-1	Not applicable	Not applicable	Not applicable	Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Convention (PIC)	Basel Convention (Hazardous Waste)
Nickel Chromium	11106-97-1	Not applicable	Not applicable	Not applicable	Not applicable

	16. Other informa	tion				
Prepared By	Stanford Advanced Materials Address : 23661 Birtcher Dr., Lake Forest, CA 92630 U.S.A. www.samaterials.com			·		
Creation Date Revision Date Print Date	23-May-2018 31-Mar-2024 31-Mar-2024	1 1 1			111	
Revision Summary	New emergency telephone response	service provid	ler.			
Disclaimer						

Nickel Chromium

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

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