TED PELLA, INC.
Microscopy Products for Science and Industry

Safety Data Sheet

Product No. 16059, 16059-10 PELCO® High Performance Nickel Paste
Issue Date (06/01/15)
Review Date (01/17/2023) Rev. 03

Section 1: Product and Company Identification

Product Name: PELCO® High Performance Nickel Paste
Synonym:
Company Name
Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477
Inside USA and Canada 1-800-237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)
Outside USA and Canada 1-530-243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)
CHEMTREC USA and Canada Emergency Contact Number 1-800-424-9300 24 hours a day
CHEMTREC Outside USA and Canada Emergency Contact Number +1-703-741-5970 24 hours a day

Section 2: Hazard Identification

Classification of the substance or mixture.

Signal Word: **WARNING**

GHS Categories:

GHS07 – Irritant	Eye Irritant:	Category 2A
	Skin Irritant:	Category 2

Label elements
GHS Pictograms:

GHS07

GHS Hazard Determining Components
Silicate Solution
Nickel

Hazard Statements

H303 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary Statements

Prevention:

P264	Wash hands thoroughly after handling.
P280	Wear protective gloves. Wear eye protection.

Response:

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P305 + P351 + P338	IF IN EYES: Remove contact lenses, if present and easy to do. Rinse cautiously with water for several minutes.
P312	IF SWALLOWED: Call a poison center or doctor if you feel unwell.
P362	Take off contaminated clothing and wash before reuse.

Disposal:

P501 Dispose in accordance with local, regional, national or international regulations

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Section 3: Composition / Information on Ingredients

Hazardous Components	CAS No.	EC No.	% w/w*	GHS Product Identifier
Nickel	7440-02-0	231-111-4	50.0–70.0%	H317 Sensitization, Skin, Cat. 1 H351 Suspected of Causing Cancer, Cat. 2 H372 STOT, Re, Causes Damage to Organs, Cat. 1
Silicate Solution	1312-76-1	215-199-1	10-0-30-0%	H302 Acute Toxicity, Oral, Cat. 4 H315 Skin Corrosion/Irritation, Cat. 2 H319 Eye Damage/Irritation, Cat. 2A H335 STOT, SE: Respiratory Tract Irritation, Cat. 3
Water	7732-18-5	N/A	20.0-30.0%	N/A

*** This product is a mixture and all powders are encapsulated**

Section 4: First Aid Measures

After eye contact: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes.
Seek immediate medical attention, preferably with an ophthalmologist.

After skin contact: Immediately wipe excess material off skin with a dry cloth then wash with soap and water for at least 5 minutes.

After inhalation: In case of inhalation due to spray mist, machining dust or dried particulate, remove source of exposure and assure that victim is breathing.
If not breathing, administer cardio-pulmonary resuscitation (CPR).

After ingestion: If swallowed, do not induce vomiting.
If victim is conscious and alert, give 1-2 glasses of water to drink.
Do not give anything by mouth to an unconscious person.
Seek medical attention immediately.

Medical Conditions Possibly Aggravated by Exposure:

Inhalation of product may aggravate existing chromic respiratory problems such as asthma, emphysema or bronchitis.
Skin contact may aggravate existing skin disease.

Section 5: Fire Fighting Measures

Flash Point: Not applicable

Flammable Limits: This material is non-combustible.

Extinguishing Media: This material is compatible with all extinguishing media.

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved positive pressure breathing apparatus with full face-piece and full chemical resistant protective clothing.
Dike area to prevent runoff and contamination of water sources.
Dispose of fire control water later.

Unusual Fire and Explosion Hazards:

This material is non-combustible.

Section 6: Accidental Release Measures

Personal Protection: Wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots.
Use NIOSH approved respirator where mist occurs.

Spill Cleanup: Mop up and neutralize liquid, then discharge to sewer in accordance with federal, state and local regulations or permits.
Flush area with water to complete cleanup.
Exercise caution during neutralization as heat may be generated.

Section 7: Handling and Storage

Handling: Avoid contact with eyes, skin and clothing.
Avoid breathing spray mist.
Keep container closed.
Promptly clean residue from closures with cloth dampened with water.
Promptly clean up spills.

Storage: Store in an area that is cool, dry, well ventilated, away from combustible material, and away from ignition sources.
Keep containers closed.
Store in clean plastic or stainless-steel containers.

Section 8: Exposure Controls / Personal Protection

Hazardous Components	CAS No.	EC No.	TLV (mg/m^3)	TLV (mg/m^3)
Nickel	7440-02-0	231-111-4	1.4	Not established
Silicate Solution	1312-76-1	215-199-1	No data available	No data available
Water	7732-18-5	N/A	No data available	No data available

Engineering Controls: Use with adequate ventilation.
Keep containers closed.
Safety shower and eyewash fountain should be within direct access.

Respiratory Protection: This product is not considered respirable in either the liquid or cured forms.
However, if the cured product is polished, ground or chipped during processing, handling or use, powders may be released as airborne respirable particles.
In these instances, appropriate personal protection equipment and local ventilation controls must be employed.
If exposure limits are exceeded and local ventilation is unavailable, a supplied-air respirator or a self-contained NIOSH-approved dust and mist respirator is required.

Skin Protection: Wear body-covering protective clothing and gloves.

Eye Protection: Wear chemical goggles.

Section 9 Physical and Chemical Properties

Appearance	Paste
Color	Gray
Odor	Odorless
Odor threshold	No data available
pH	11.0 – 11.5
Specific gravity	2.60 – 2.80
Solubility in H_2O	Soluble
Melting point/range	No data available

Boiling point/range	100°C
Vapor pressure	Not applicable
Vapor density (air = 1)	No data available
VOC Content	0.00 lbs/gal
Viscosity	>1000,000cP
Decomposition temperature	Not applicable
Auto-ignition temperature	Not applicable
Partition coefficient	No data available
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability	Not applicable

Section 10: Stability and Reactivity

Chemical Stability:	This material is stable under all conditions of use and storage.
Conditions to Avoid:	Prolonged contact with aluminum, brass, copper, lead, and zinc may produce flammable hydrogen gas.
Materials to Avoid:	Gels and heats when mixed with acid. May react with ammonium salts resulting in evolution of ammonia gas.
Hazardous Decomposition Products:	None.
Hazardous Polymerization:	Will not occur.

Section 11: Toxicological Information

Acute Toxicity:	Component: Silicate Solution (CAS No. 1344-09-8) LD50 Oral, 1153 mg/kg (Rat) LD50, Inhalation, No Data LD50, Dermal, 4640 mg/kg (Rabbit)
Skin Corrosion/Irritation:	Irritating to skin
Serious Eye Damage/Irritation:	Irritating to eyes
Sensitization:	Not sensitizing
Mutagenicity:	No data
Reproductive Toxicity:	No data
Carcinogenicity:	This product is not listed by IARC, NTP, OSHA, or ACGIH as a known or suspected carcinogen.

Section 12: Ecological Information

Ecotoxity:	This material is believed to be practically non-toxic to aquatic life.
Biodegradation:	This material is inorganic and not subject to biodegradation.
Persistence:	This material is believed to persist in the environment.
Bioconcentration:	This material is not expected to bioconcentrate in organisms.
Physical/Chemical:	Sinks and mixes with water. Only water will evaporate from this material.

Section 13 Disposal Considerations

Disposal Method: Dispose in accordance with federal, state and local regulations and permits.

Section 14: Transportation Information

International Regulations

IATA-DGR

UN identification number — Not regulated

IMDG-Code

UN identification number — Not regulated

Domestic Regulations

DOT

UN identification number — Not regulated

Special precautions for user

The transport classification(s) provided herein are for information purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet (SDS). Transportation classifications may vary by mode of transportation, package size, and variations in regional or country regulations.

Section 15: Regulatory Information

CERCLA: No CERCLA reportable quantity has been established for this material.

TSCA: All ingredients of this material are listed on the TSCA inventory.

SARA Title III

Sections 302, 304, 313: This product does not contain any substances reportable under these sections.

Sections 311, 312:

Hazard Classes	Yes/No
Fire Hazard:	No
Reactivity Hazard:	No
Pressure Hazard:	No
Immediate Hazard:	Yes
Delayed Hazard:	No

International Inventory Status

Canada (DSL):	Yes
Europe (EINECS/ELINCS):	Yes
Australia (AICS):	Yes
Japan (MITI):	Yes
South Korea (KECL):	Yes

California Prop. 65

WARNING: This product can expose you to chemicals including Nickel, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

NFPA Rating (scale 0-4)

Health =1
Flammability =0
Reactivity = 0
Personal Protection = C

HMIS Rating (scale 0-4)

Health =1
Flammability =0
Reactivity = 0
Personal Protection = C

Section 16: Other Information

Full text of other abbreviations

ACGIH:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI:	ACGIH - Biological Exposure Indices (BEI)
NIOSH REL:	USA. NIOSH Recommended Exposure Limits
OSHA Z-1:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-2:	USA. Occupational Exposure Limits (OSHA) - Table Z-2
US WEEL:	USA. Workplace Environmental Exposure Levels (WEEL)
ACGIH / TWA:	8-hour, time-weighted average
ACGIH / STEL:	Short-term exposure limit
NIOSH REL/TWA:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL/ST:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA Z-1 / TWA:	8-hour time weighted average
OSHA Z-2/TWA:	8-hour time weighted average
OSHA Z-2/CEIL:	Acceptable ceiling concentration
OSHA Z-2/Peak:	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift
US WEEL/TWA:	8-hr TWA

AICS - Australian Inventory of Chemical Substances;
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 Standardization;
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 Organization 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, Authorization 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;
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
