SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Revision Date 26-Feb-2025 **Version** 1

1. Identification

Product identifier

Product Name NICKEL ANTI-SEIZE LUBRICANT 1LB BB

Other means of identification

Product Code 77164

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lubricant

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address
ITW Permatex, Inc.
6875 Parkland Blvd.
Solon, Ohio 44139 USA
Telephone: 1-87-Permatex
(866) 732-9502

May Also Be Distributed by:
ITW Permatex Canada
101-2360 Bristol Circle
Oakville, ON Canada L6H 6M5
Telephone: (800) 924-6994

E-mail address mail@permatex.com

Emergency telephone number

Company Phone Number 866-732-9502

24 Hour Emergency Phone Number Chem-Tel: 800-255-3924
International Emergency:
00+1+ 813-248-0585
Contract Number: MIS0003453

24-hour emergency phone number No information available

2. Hazard(s) identification

Classification

Skin sensitization	Category 1
Carcinogenicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 1

Label elements

Contains DISTILLATES (PETROLEUM), SOLVENT-REFINED HEAVY NAPHTHENIC (<3% DMSO); NICKEL

Danger

Hazard statements
May cause an allergic skin reaction.
May cause cancer.
Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements - Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves, protective clothing, eye protection and face protection.
Contaminated work clothing should not be allowed out of the workplace.
Do not breathe dust.
Wash face, hands and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see supplemental first aid instructions on this label).
Skin
IF ON SKIN: Wash with plenty of water and soap.
If skin irritation or rash occurs: Get medical advice and attention.
Take off contaminated clothing and wash it before reuse.

Precautionary Statements - Storage
Store locked up.
Precautionary Statements - Disposal
Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

Unknown acute toxicity
30.5 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
40 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
97 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Other Information
May be harmful in contact with skin. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
DISTILLATES (PETROLEUM), SOLVENT-REFINED HEAVY	64741-96-4	45-70%	-	-

NAPHTHENIC (<3% DMSO)				
GRAPHITE	7782-42-5	10-30%	-	-
NICKEL	7440-02-0	5-10%	-	-
ALUMINIUM POWDER	7429-90-5	1-5%	-	-

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention. Immediate medical attention is required.

Inhalation If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Do not breathe vapor or mist. Use personal protective equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives. Coughing and/ or wheezing. Difficulty in breathing.

Effects of Exposure May cause cancer. Causes damage to organs through prolonged or repeated exposure.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Small Fire In case of fire, use water spray, foam, dry chemical, or CO2.
Large Fire In case of fire, use water spray, foam, dry chemical, or CO2.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous combustion products No information available.

Explosion data
Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Do not breathe vapor or mist.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Do not breathe vapor or mist. Handle product only in closed system or provide appropriate exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

8. Exposure controls/personal protection

Control Parameters
Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
GRAPHITE 7782-42-5	TWA: 2 mg/m³ respirable particulate matter all forms except graphite fibers	TWA: 15 mg/m³ total dust synthetic TWA: 5 mg/m³ respirable fraction synthetic TWA: 15 mppcf respirable dust natural (vacated) TWA: 2.5 mg/m³ respirable dust natural (vacated) TWA: 10 mg/m³ total dust synthetic (vacated) TWA: 5 mg/m³ respirable fraction synthetic TWA: 15 mppcf natural	TWA: 2.5 mg/m³; natural respirable dust IDLH: 1250 mg/m³
NICKEL	TWA: 1.5 mg/m³ inhalable	TWA: 1 mg/m³	TWA: 0.015 mg/m³;

7440-02-0	particulate matter	(vacated) TWA: 1 mg/m³	IDLH: 10 mg/m³
ALUMINIUM POWDER 7429-90-5	TWA: 1 mg/m³ respirable particulate matter	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 15 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction (vacated) TWA: 5 mg/m³ Al Aluminum	TWA: 10 mg/m³; total dust TWA: 5 mg/m³; respirable dust TWA: 5 mg/m³; Al

Chemical name	Alberta	British Columbia	Ontario	Quebec
GRAPHITE 7782-42-5	TWA: 2 mg/m³; respirable	TWA: 2 mg/m³; respirable	TWA: 2 mg/m³; respirable particulate matter	TWAEV: 2 mg/m³; respirable dust
NICKEL 7440-02-0	TWA: 1.5 mg/m³;	TWA: 0.05 mg/m³;	TWA: 1 mg/m³; inhalable fraction	TWAEV: 1.5 mg/m³; inhalable dust
ALUMINIUM POWDER 7429-90-5	TWA: 10 mg/m³; dust TWA: 5 mg/m³;	TWA: 1.0 mg/m³; respirable	TWA: 1 mg/m³; respirable particulate matter	TWAEV: 5 mg/m³;

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
GRAPHITE	TWA: 2 mg/m³; respirable particulate matter	TWA: 2 mg/m³; respirable fraction	TWA: 2 mg/m³; respirable particulate matter	TWA: 2 mg/m³; respirable particulate matter
NICKEL	TWA: 1.5 mg/m³; inhalable particulate matter	TWA: 1.5 mg/m³; inhalable fraction	TWA: 1.5 mg/m³; inhalable particulate matter	TWA: 1.5 mg/m³; inhalable particulate matter
ALUMINIUM POWDER	TWA: 1 mg/m³; respirable particulate matter	TWA: 1 mg/m³; respirable fraction	TWA: 1 mg/m³; respirable particulate matter	TWA: 1 mg/m³; respirable particulate matter

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
GRAPHITE	TWA: 2 mg/m³; respirable fraction STEL: 4 mg/m³; respirable fraction	TWA: 2 mg/m³; respirable particulate matter	TWA: 2 mg/m³; respirable fraction STEL: 4 mg/m³; respirable fraction	TWA: 20 mppcf; TWA: 30 mppcf; TWA: 10 mg/m³;
NICKEL	TWA: 1.5 mg/m³; inhalable fraction STEL: 3 mg/m³; inhalable fraction Designated substance	TWA: 1.5 mg/m³; inhalable particulate matter	TWA: 1.5 mg/m³; inhalable fraction STEL: 3 mg/m³; inhalable fraction Designated Chemical Substance	TWA: 1 mg/m³; STEL: 3 mg/m³;
ALUMINIUM POWDER	TWA: 10 mg/m³; dust STEL: 20 mg/m³; dust	TWA: 1 mg/m³; respirable particulate matter	TWA: 10 mg/m³; dust STEL: 20 mg/m³; dust	

Biological occupational exposure limits

Chemical name	ACGIH
NICKEL 7440-02-0	5 µg/L - urine (Nickel) - post-shift at end of workweek

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection Use appropriate respiratory protection.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

Thermal hazards No information available.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Paste / Gel Liquid
Appearance	Silver Paste
Color	Silver
Odor	No information available
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	No data available	
Melting point / freezing point	No data available	
Boiling point / boiling range	No data available	
Flash point	> 204 °C / 399.2 °F	
Evaporation rate	< 1	Butyl acetate = 1
Flammability (solid, gas)	No data available	
Flammability Limit in Air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	
Vapor density	No data available	
Relative density	1.12	
Water solubility	Negligible	
Solubility(ies)	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Kinematic viscosity	No data available	
Dynamic viscosity	No data available	
Particle characteristics		
Particle Size	No data available	
Particle Size Distribution	No data available	

Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC content	0
Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid Excessive heat.

Incompatible materials None known based on information supplied.

Hazardous decomposition products Carbon oxides. Metal oxides.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Toxic by inhalation. (based on components).

Eye contact Specific test data for the substance or mixture is not available.

Skin contact May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). May be harmful in contact with skin.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives. Coughing and/ or wheezing. Difficulty in breathing.

Acute toxicity Toxic by inhalation.

Numerical measures of toxicity

The following ATE values have been calculated for the mixture

ATEmix (oral)	5,323.40 mg/kg
ATEmix (dermal)	5,000.00 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-vapor)	99,999.00 mg/l

Unknown acute toxicity

30.5 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
40 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
97 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
DISTILLATES (PETROLEUM), SOLVENT-REFINED HEAVY NAPHTHENIC (<3% DMSO) 64741-96-4	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
GRAPHITE 7782-42-5	-	-	> 2000 mg/m³ (Rat) 4 h

NICKEL 7440-02-0	> 9000 mg/kg (Rat)	-	> 10.2 mg/L (Rat) 1 h
ALUMINIUM POWDER 7429-90-5	-	-	> 0.888 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

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

Chemical name	ACGIH	IARC	NTP	OSHA
NICKEL 7440-02-0	A5 - Not Suspected as a Human Carcinogen	Group 2B - Possibly carcinogenic to humans	Reasonably Anticipated To Be A Human Carcinogen	Present
ALUMINIUM POWDER 7429-90-5	A4 - Not Classifiable as a Human Carcinogen	-	-	-

Legend

IARC (International Agency for Research on Cancer)
Group 2B - Possibly carcinogenic to humans
NTP (National Toxicology Program)
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
Occupational Safety and Health Administration of the US Department of Labor
X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
DISTILLATES (PETROLEUM), SOLVENT-REFINED HEAVY NAPHTHENIC (<3% DMSO) 64741-96-4	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
GRAPHITE 7782-42-5	-	LC50: >100mg/L (96h, Danio rerio)	-	-
NICKEL	EC50: =0.18mg/L (72h,	LC50: >100mg/L (96h,	-	EC50: >100mg/L (48h,

7440-02-0	Pseudokirchneriella subcapitata) EC50: 0.174 - 0.311mg/L (96h, Pseudokirchneriella subcapitata)	Brachydanio rerio) LC50: =1.3mg/L (96h, Cyprinus carpio) LC50: =10.4mg/L (96h, Cyprinus carpio)		Daphnia magna) EC50: =1mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

US EPA Waste Number Waste designations and classifications should be determined by the end user based on the application for which the product was used.

14. Transport information

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory information

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

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA Complies
DSL/NDSL Complies

EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECI	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing Chemicals Inventory
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

US 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.

Chemical name	SARA 313 - Threshold Values %
NICKEL - 7440-02-0	0.1
ALUMINIUM POWDER - 7429-90-5	1.0

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)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
NICKEL 7440-02-0	-	X	X	-

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
NICKEL 7440-02-0	100 lb / kg (final RQ)	-	RQ 100 lb final RQ RQ 45.4 kg final RQ

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
NICKEL - 7440-02-0	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
GRAPHITE 7782-42-5	X	X	X
NICKEL 7440-02-0	X	X	X
ALUMINIUM POWDER	X	X	X

7429-90-5			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	**Health hazards** 3	**Flammability** 1	**Instability** 0	**Special hazards** -
HMIS	**Health hazards** 3 *	**Flammability** 1	**Physical hazards** 0	**Personal protection** X

Chronic Hazard Star Legend ** = Chronic Health Hazard*

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend
SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

Key literature references and sources for data used to compile the SDS
U.S. Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
U.S. Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
United Nations World Health Organization (WHO)

Revision Date 26-Feb-2025

Revision Note No information available.

Disclaimer

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.