



Safety Data Sheet

acc. to OSHA HCS

Printing date 07/17/2015

Reviewed on 05/22/2015

1 Identification

- Product identifier

- Trade name: ND Anti-Seize
 - Synonyms: 917 Anti-Seize Low Nickel
 - Part number: 917LN

- Relevant identified uses of the substance or mixture Threaded connection anti-seize and lubrication

- Details of the supplier of the safety data sheet

- *Manufacturer/Supplier:* ND Industries, Inc 1000 North Crooks Road Clawson, MI 48017 USA Telephone: +1-248-288-0000 Email: info@ndindustries.com Website: www.ndindustries.com
- Information department: Product safety department
- *Emergency telephone number:* United States: 1-800-424-9300 International: +1-703-527-3887

2 Hazard(s) identification

- Classification of the substance or mixture



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



Skin Sens. 1 H317 May cause an allergic skin reaction.

- Label elements

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
 - Hazard pictograms



- Signal word Danger
- Hazard-determining components of labeling:
- nickel powder (particle diameter < 1 mm)

Triethanolamine

- Hazard statements
- H317 May cause an allergic skin reaction.
- H351 Suspected of causing cancer.
- H372 Causes damage to organs through prolonged or repeated exposure.
- Precautionary statements
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P280 Wear protective gloves.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P363 Wash contaminated clothing before reuse.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P314 Get medical advice/attention if you feel unwell.
- P302+P352 If on skin: Wash with plenty of water.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Printing date 07/17/2015

Classification system:
 NFPA ratings (scale 0 - 4)



- HMIS-ratings (scale 0 - 4)



Other hazards

- Results of PBT and vPvB assessment

- **PBT:** Not applicable.

- vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures

- Description: Mixture of the substances listed below with nonhazardous additions.

- Dangerous components:

7440-02-0 nickel powder (particle diameter < 1 mm)

Triethanolamine

4 First-aid measures

- Description of first aid measures

- General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. - *After inhalation:*

- Alter Innalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:

- Most important symptoms and effects, both acute and delayed No further relevant information available.

- Indication of any immediate medical attention and special treatment needed

5 Fire-fighting measures

Extinguishing media

- Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- Special hazards arising from the substance or mixture No further relevant information available.

- Advice for firefighters

- Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation
Wear protective clothing.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.

- Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

- Reference to other sections
- See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Reviewed on 05/22/2015

(Contd. of page 1)

1-5%

No further relevant information available.

Printing date 07/17/2015

Trade name: ND Anti-Seize

(Contd. of page 2)

Reviewed on 05/22/2015

7 Handling and storage

- Handling:

- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

- Information about protection against explosions and fires: No special measures required.

- Conditions for safe storage, including any incompatibilities

Storage:

- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.

Control parameters

- Components with limit values that require monitoring at the workplace:

7440-02-0 nickel powder (particle diameter < 1 mm)

- PEL Long-term value: 1 mg/m³
- REL Long-term value: 0.015 mg/m³ as Ni; See Pocket Guide App. A
- TLV Long-term value: 1.5* mg/m³ elemental, *inhalable fraction
 - Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

- Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- *Eye protection:* Goggles recommended during refilling.
- Body protection: Protective work clothing

9 Physical and chemical properties		
- Information on basic physical and chemical properties - General Information - Appearance:		
- Form:	Pasty	
	,	
- Color:	Silver grey	
- Odor:	Characteristic	
 Odour threshold: 	Not determined.	
- pH-value:	Not determined.	
		(Contd. on page

Printing date 07/17/2015

Trade name: ND Anti-Seize

Reviewed on 05/22/2015

	(Contd. of p	age 3
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Undetermined. 100 °C (212 °F)	
- Flash point:	Not applicable.	
 Flammability (solid, gaseous): 	Not applicable.	
- Ignition temperature:		
- Decomposition temperature:	Not determined.	
- Auto igniting:	Product is not selfigniting.	
- Danger of explosion:	Product does not present an explosion hazard.	
- Explosion limits: - Lower: - Upper:	Not determined. Not determined.	
- Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)	
- Density: - Relative density - Vapour density - Evaporation rate	Not determined. Not determined. Not determined. Not determined.	
 Solubility in / Miscibility with Water: 	Not miscible or difficult to mix.	
- Partition coefficient (n-octanol/wa	ater): Not determined.	
- Viscosity: - Dynamic: - Kinematic:	Not determined. Not determined.	
 Solvent content: Organic solvents: Water: 	0.0 % 59.7 %	
- Solids content: - Other information	38.4 % No further relevant information available.	

10 Stability and reactivity

- Reactivity No further relevant information available.

- Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

- Possibility of hazardous reactions No dangerous reactions known.

- Conditions to avoid No further relevant information available.

- Incompatible materials: No further relevant information available.

- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects

- Acute toxicity:

- LD/LC50 values that are relevant for classification:

Triethanolamine

Oral LD50 6846 mg/kg (mouse)

- Primary irritant effect:

- on the skin: No irritant effect.

- on the eye: No irritating effect.

- Sensitization: Sensitization possible through skin contact.

- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

Reviewed on 05/22/2015

Printing date 07/17/2015

Trade name: ND Anti-Seize

	(Contd. of page 4)
- Carcinogenic categories	
- IARC (International Agency for Research on Cancer)	
7440-02-0 nickel powder (particle diameter < 1 mm)	1
- NTP (National Toxicology Program)	
7440-02-0 nickel powder (particle diameter < 1 mm)	R
 OSHA-Ca (Occupational Safety & Health Administration) 	
None of the ingredients is listed.	

12 Ecological information

- Toxicity

- Aquatic toxicity: No further relevant information available.

- Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
 - Bioaccumulative potential No further relevant information available.
 - Mobility in soil No further relevant information available.
- Additional ecological information:

- General notes:

Water hazard class 2 (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

- Results of PBT and vPvB assessment
 - PBT: Not applicable.
 - vPvB: Not applicable.

- Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods

- Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:

- Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number - DOT, ADN, IMDG, IATA	not regulated	
 - UN proper shipping name - DOT, ADN, IMDG, IATA 	not regulated	
- Transport hazard class(es)		
- DOT, ADN, IMDG, IATA - Class	not regulated	
- Packing group - DOT, IMDG, IATA	not regulated	
 Environmental hazards: Marine pollutant: 	No	
- Special precautions for user	Not applicable.	
Transport in bulk according to Annex II and the IBC Code	of MARPOL73/78 Not applicable.	
- UN "Model Regulation":	not regulated	

15 Regulatory information

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

- Section 355 (extremely hazardous substances):	
None of the ingredients is listed.	
- Section 313 (Specific toxic chemical listings):	
7440-02-0 nickel powder (particle diameter < 1 mm)	

Trade name: ND Anti-Seize

Reviewed on 05/22/2015

	(Contd. of page
- TSCA (Toxic Substances Control Act):	
Graphite	
nickel powder (particle diameter < 1 mm)	
Deionized water	
- Proposition 65	
- Chemicals known to cause cancer:	
7440-02-0 nickel powder (particle diameter < 1 mm)	
- Chemicals known to cause reproductive toxicity	for females:
None of the ingredients is listed.	
- Chemicals known to cause reproductive toxicity	for males:
None of the ingredients is listed.	
Chemicals known to cause developmental toxicity	y:
None of the ingredients is listed.	
- Carcinogenic categories	
 EPA (Environmental Protection Agency) 	
None of the ingredients is listed.	
- TLV (Threshold Limit Value established by ACGI	Ч)
7440-02-0 nickel powder (particle diameter < 1 mm)	A
- NIOSH-Ca (National Institute for Occupational Sa	fety and Health)
7440-02-0 nickel powder (particle diameter < 1 mm)	
- Chemical safety assessment: A Chemical Safety Assessment ha	s not been carried out.
6 Other information	
This information is based on our present knowledge. However, this sha shall not establish a legally valid contractual relationship.	I not constitute a guarantee for any specific product features and
 Department issuing SDS: ND Industries, Inc Safety, Health and Contact: Safety, Health and Environmental Affaires Date of preparation / last revision 07/17/2015 / 1 	Environmental Affaires
 Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (EuropIMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LCS0: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPVB: very Persistent and very Bioaccumulative 	ean Agreement concerning the International Carriage of Dangerous Goods by Road)

VPVB: very Persistent and very Bioaccumulative Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Carc. 2: Carcinogenicity, Hazard Category 2 STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

- * Data compared to the previous version altered.

- Disclaimer

The information set forth is based on information that ND Industries, Incorporated believes to be accurate. No warranty, expressed or implied, is intended. The information is provided solely for your information and consideration and ND Industries Inc. assumes no legal responsibility for use or reliance thereon. In the event of a discrepancy between the information on the non-English document and its English counterpart, the English version shall supersede.

®ND and ND Industries, Inc. are registered trademarks of ND Industries Incorporated, ®Vibra-TITE is a registered trademark of ND Industries, Inc.