SAFETY DATA SHEET

in accordance with 2020/878/EU (REACH, Annex II) 29 CFR 1910.1200, WHMIS 2015 and Safe Work Australia

Revision date: 4 November 2023 **Date of previous issue:** 23 January 2023 **SDS No.** 199-19

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

772 Premium Nickel Anti-Seize Compound (Bulk)

Unique Formula Identifier (UFI): GNUK-Q096-5581-N2N0

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Petroleum base. Use on stainless steel, steel, iron, aluminum, copper, brass, titanium, etc. Do not use on oxygen systems.

Uses advised against: No information available

Reason why uses advised against: Not applicable

1.3. Details of the supplier of the safety data sheet

Company:
A.W. CHESTERTON COMPANY
860 Salem Street
Groveland, MA 01834-1507, USA
Tel. +1 978-469-6446 Fax: +1 978-469-6785
(Mon. - Fri. 8:30 - 5:00 PM EST)
SDS requests: www.chesterton.com
E-mail (SDS questions): ProductSDSs@chesterton.com
E-mail: customer.service@chesterton.com

Canada: A.W. Chesterton Company Ltd., 889 Fraser Drive,
Unit 105, Burlington, Ontario L7L 4X8 – Tel. 905-335-5055
EU: Chesterton International GmbH, Am Lenzenfleck 23,
D85737 Ismaning, Germany – Tel. +49-89-996-5460

Supplier:

1.4. Emergency telephone number

24 hours per day, 7 days per week
Call Infotrac: 1-800-535-5053
Outside N. America: +1 352-323-3500 (collect)
NSW Poisons Information Centre (Australia): 13 11 26

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / Safe Work Australia / GHS

Skin sensitization, Category 1, H317
Specific target organ toxicity – repeated exposure, Category 1, H372 (lungs, inhalation)
Carcinogenicity, Category 2, H351 (inhalation)

2.1.2. Additional information

For full text of H-statements: see SECTIONS 2.2 and 16.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / Safe Work Australia / GHS

Hazard pictograms:

Signal word: Danger

Hazard statements:	H317	May cause an allergic skin reaction.
	H351	Suspected of causing cancer by inhalation.
	H372	Causes damage to the lungs through prolonged or repeated exposure by inhalation.
Precautionary statements:	P201	Obtain special instructions before use.
	P202	Do not handle until all safety precautions have been read and understood.
	P264	Wash face, hands and any exposed skin 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.
	P280	Wear protective gloves and eye protection.
	P302/352	IF ON SKIN: Wash with plenty of soap and water.
	P308/313	IF exposed or concerned: Get medical advice/attention.
	P362/364	Take off contaminated clothing and wash it before reuse.
	P405	Store locked up.
	P501	Dispose of contents/container to an approved waste disposal plant.
Supplemental information:	None	

2.3. Other hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hazardous Ingredients[1]	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification	SCL, M-factor, ATE
White mineral oil (petroleum)	30-40	8042-47-5 232-455-8	NA	Asp. Tox. 1, H304	ATE (oral): > 5,000 mg/kg ATE (dermal): > 2,000 mg/kg ATE (inhalation, mist): > 5 mg/l
Nickel	20-24.9	7440-02-0 231-111-4	NA	Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372 Aquatic Chronic 3, H412	NA
Other ingredients:					
Calcium carbonate	10-20	1317-65-3 215-279-6	NA	Not classified*	ATE (oral): 6,450 mg/kg
Graphite	7-13	7782-42-5 231-955-3	NA	Not classified*	ATE (oral): > 2,000 mg/kg

*Substance with a workplace exposure limit.
For full text of H-statements: see SECTIONS 2.2 and 16.

[1] Classified according to:
- 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F)
- 1272/2008/EC, GHS, REACH
- WHMIS 2015
- Safe Work Australia

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: Remove to fresh air. If not breathing, administer artificial respiration. Contact physician.

Skin contact: Wash skin with soap and water. Contact physician if irritation persists.

Eye contact: Flush eyes for at least 15 minutes with large amounts of water. Contact physician if irritation persists.

Ingestion: Do not induce vomiting. Contact physician immediately.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. Avoid contact with the product while providing aid to the victim. See section 8.2.2 for recommendations on personal protective equipment.

4.2. Most important symptoms and effects, both acute and delayed

Direct contact may cause mild eye and skin irritation. Prolonged or repeated skin contact may defat the skin and cause minimal to slight skin irritation. May cause allergic skin sensitization.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Carbon dioxide, dry chemical, foam or water fog

Unsuitable extinguishing media: High volume water jet

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon Monoxide, Carbon Dioxide and other toxic fumes.

Other hazards: None

5.3. Advice for firefighters

Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.

Australian HAZCHEM Emergency Action Code: 2 Z

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Utilize exposure controls and personal protection as specified in Section 8.

6.2. Environmental Precautions

Keep out of sewers, streams and waterways.

6.3. Methods and material for containment and cleaning up

Scoop up and transfer to a suitable container for disposal.

6.4. Reference to other sections

Refer to section 13 for disposal advice.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Observe good work practice - avoid eating, drinking and smoking in the work area while using any hydrocarbons. Do not breathe dust/mist. Utilize exposure controls and personal protection as specified in Section 8. Contaminated work clothing must not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry area.

7.3. Specific end use(s)

No special precautions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limit values

Ingredients	OSHA PEL[1]		ACGIH TLV[2]		UK WEL[3]		AUSTRALIA ES[4]	
	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³
Nickel*	N/A	1	(inhal.)	1.5	N/A	0.5	N/A	1
Calcium carbonate	(total) (resp.)	15 5	(inhal.)	10	(inhal.) (resp.)	10 4	N/A	10
Graphite*	(total) (resp.)	15 5	(resp.)	2	(inhal.) (resp.)	10 4	(resp.)	3
Oil mist, mineral	N/A	5	(inhal.)	5 (inhal.)	N/A	N/A	N/A	5

*The nickel and graphite in this product do not separate from the mixture or in of themselves become airborne, therefore, do not present a hazard in normal use.

[1] United States Occupational Health & Safety Administration permissible exposure limits
[2] American Conference of Governmental Industrial Hygienists threshold limit values
[3] EH40 Workplace exposure limits, Health & Safety Executive
[4] Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants

Biological limit values

No biological exposure limits noted for the ingredient(s).

Derived No Effect Level (DNEL) according to Regulation (EC) No 1907/2006:

Workers

Substance	Route of exposure	Potential health effects	DNEL
White mineral oil (petroleum)	Inhalation	Chronic effects	160 mg/m^3 (GESTIS)
Nickel	Inhalation	Acute effects, local	11.9 mg/m^3
		Chronic effects, local	0.05 mg/m^3
		Chronic effects, systemic	0.05 mg/m^3
	Dermal	Chronic effects, local	0.035 mg/cm^2
Calcium carbonate	Inhalation	Acute effects, local	6.36 mg/m^3 (GESTIS)
Graphite	Inhalation	Acute effects, local	1.2 mg/m^3 (GESTIS)
		Chronic effects, local	1.2 mg/m^3 (GESTIS)

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No 1907/2006:

Substance	Environmental protection target	PNEC
Nickel	Fresh water	7.1 µg/l
	Freshwater sediments	109 mg/kg
	Marine water	8.6 µg/l
	Marine sediments	109 mg/kg
	Soil (agricultural)	29.9 mg/kg

8.2. Exposure controls

8.2.1. Engineering measures

No special requirements. If exposure limits are exceeded, provide adequate ventilation.

8.2.2. Individual protection measures

Respiratory protection: Not normally needed. If exposure limits are exceeded, use a half or full-face respirator with combined dust/organic vapour filter.

Protective gloves: Chemical resistant gloves

Nickel:

Contact type	Glove material	Layer thickness	Breakthrough time*
Full	Nitrile rubber	0.11 mm	> 480 min.
Splash	Nitrile rubber	0.11 mm	> 480 min.

*Determined according to EN374 standard.

Eye and face protection: Safety glasses

Other: None

8.2.3. Environmental exposure controls

Refer to sections 6 and 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	paste	**pH**	not applicable
Colour	black	**Kinematic viscosity**	1 million cps @25°C
Odour	mild odor	**Solubility in water**	insoluble
Odour threshold	not determined	**Partition coefficient n-octanol/water (log value)**	not applicable
Boiling point or range	not determined	**Vapour pressure @ 20°C**	not determined
Melting point/freezing point	not determined	**Density and/or relative density**	1.47 kg/l
% Volatile (by volume)	0%	**Weight per volume**	12.2 lbs/gal
Flammability	not determined	**Vapour density (air=1)**	> 1
Lower/upper flammability or explosion limits	not determined	**Rate of evaporation (ether=1)**	< 1
Flash point	>138°C (>280°F)	**% Aromatics by weight**	< 0.5%
Method	PM Closed Cup	**Particle characteristics**	not applicable
Autoignition temperature	not determined	**Explosive properties**	not applicable
Decomposition temperature	not applicable	**Oxidising properties**	not applicable

9.2. Other information

VOC, EPA 24: 0.12 lbs/gal

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Refer to sections 10.3 and 10.5.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under conditions of normal use.

10.4. Conditions to avoid

Open flames, heat, sparks and red hot surfaces.

10.5. Incompatible materials

Acids and strong oxidizers like liquid Chlorine and concentrated Oxygen. Nickel can react vigorously with acids to liberate hydrogen, which can form explosive mixtures with air.

10.6. Hazardous decomposition products

Carbon Monoxide, Carbon Dioxide and other toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 / GHS

Primary route of exposure under normal use: Inhalation, skin and eye contact.

Acute toxicity -

Oral:

Substance	Test	Result
White mineral oil (petroleum)	LD50, rat	> 5,000 mg/kg
Calcium carbonate	LD50, rat	6,450 mg/kg
Graphite	LD50, rat	> 2,000 mg/kg

Dermal:

Substance	Test	Result
White mineral oil (petroleum)	LD50, rabbit	> 2,000 mg/kg

Inhalation:

Substance	Test	Result
White mineral oil (petroleum)	LC50, rat, 4 hours	> 5 mg/l
Nickel	NOAEC, rat, 1 h	> 10.2 mg/l
Graphite	LC50, rat, 4 hours	> 2 mg/l

Skin corrosion/irritation: Prolonged or repeated skin contact may defat the skin and cause minimal to slight skin irritation.

Substance	Test	Result
White mineral oil (petroleum)	Skin irritation, rabbit	Not irritating
Graphite	Skin irritation, rabbit	Not irritating

Serious eye damage/ irritation: Direct contact may cause mild eye irritation.

Substance	Test	Result
White mineral oil (petroleum)	Eye irritation, rabbit	Not irritating

Respiratory or skin sensitisation: Nickel: May cause allergic skin sensitization.

Substance	Test	Result
Graphite	Skin sensitization, mouse	Not sensitizing

Germ cell mutagenicity: White mineral oil (petroleum), Nickel, Calcium carbonate: based on available data, the classification criteria are not met.

Carcinogenicity: The National Toxicology Program (NTP) has listed Nickel powder as a potential carcinogen based on inhalation studies. The International Agency for Research on Cancer (IARC) has designated Nickel as possibly carcinogenic to humans (group 2B). The Nickel in this product is not in powder form and should not present a hazard in normal use. The U.S. National Institute for Occupational Safety and Health (NIOSH) concluded that there is no evidence that nickel metal is carcinogenic when ingested. To date, there is no evidence that nickel metal causes cancer in humans based on epidemiology data from workers in the nickel producing and nickel consuming industries. A recent animal (rat) inhalation study showed no increased respiratory cancer risk for nickel metal powder indicating that no carcinogen classification is warranted for nickel metal. WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

Reproductive toxicity: White mineral oil (petroleum), Nickel, Graphite: based on available data, the classification criteria are not met.

STOT – single exposure: White mineral oil (petroleum), Nickel, Graphite: based on available data, the classification criteria are not met.

STOT – repeated exposure: Nickel: Causes damage to lungs through prolonged or repeated inhalation exposure. White mineral oil (petroleum), Graphite: based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

11.2. Information on other hazards

None

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar substances.

12.1. Toxicity

No data available for the mixture. Oil products, improperly released to the environment, can cause ground and water pollution.

12.2. Persistence and degradability

Mineral oil: not readily biodegradable. Nickel, Calcium carbonate, Graphite: inorganic substances.

12.3. Bioaccumulative potential

Nickel, Calcium carbonate, Graphite: not expected to bioaccumulate.

12.4. Mobility in soil

Paste. Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). Mineral oil: expected to exhibit low mobility in soil.

12.5. Results of PBT and vPvB assessment

Not available

12.6. Endocrine disrupting properties

No information available

12.7. Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Appropriate treatment standards for nickel must be met prior to disposal. This product is classified as a hazardous waste according to 2008/98/EC. Check local, state and national/federal regulations and comply with the most stringent requirement.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number or ID number

ADG/ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE
TDG: NOT APPLICABLE
US DOT: NOT APPLICABLE

14.2. UN proper shipping name

ADG/ADR/RID/ADN/IMDG/ICAO: NON-HAZARDOUS, NON REGULATED
TDG: NON-HAZARDOUS, NON REGULATED
US DOT: NON-HAZARDOUS, NON REGULATED

14.3. Transport hazard class(es)

ADG/ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE
TDG: NOT APPLICABLE
US DOT: NOT APPLICABLE

14.4. Packing group

ADG/ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE
TDG: NOT APPLICABLE
US DOT: NOT APPLICABLE

14.5. Environmental hazards

NOT APPLICABLE

14.6. Special precautions for user

NOT APPLICABLE

14.7. Maritime transport in bulk according to IMO instruments

NOT APPLICABLE

14.8. Other information

NOT APPLICABLE

SECTION 15: REGULATORY INFORMATION

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

15.1.1. EU regulations

Authorisations under Title VII: Not applicable

Restrictions under Title VIII: None

Other EU regulations: Directive 92/85/EEC on the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding;
Directive 94/33/EC on the protection of young people at work.

15.1.2. National regulations

US EPA SARA TITLE III

312 Hazards:	**Chemicals subject to reporting requirements of Section 313 of EPCRA and of 40 CFR 372:**		
Skin sensitization Specific target organ toxicity – repeated exposure Carcinogenicity	Nickel	7440-02-0	20-24.9%

TSCA: All chemical components are listed or exempted.

Other national regulations: National implementations of the EC Directives referred to in section 15.1.1.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms:

ADG: Australian Dangerous Goods Code
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE: Acute Toxicity Estimate
BCF: Bioconcentration Factor
cATpE: Converted Acute Toxicity point Estimate
CLP: Classification Labelling Packaging Regulation (1272/2008/EC)
ES: Exposure Standard
GHS: Globally Harmonized System
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
LC50: Lethal Concentration to 50 % of a test population
LD50: Lethal Dose to 50% of a test population
LOEL: Lowest Observed Effect Level
N/A: Not Applicable
NA: Not Available
NOEC: No Observed Effect Concentration
NOEL: No Observed Effect Level
OECD: Organization for Economic Co-operation and Development
PBT: Persistent, Bioaccumulative and Toxic substance
(Q)SAR: Quantitative Structure-Activity Relationship
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (1907/2006/EC)
REL: Recommended Exposure Limit
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
SCL: Specific Concentration Limit
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
STOT RE: Specific Target Organ Toxicity, Repeated Exposure
STOT SE: Specific Target Organ Toxicity, Single Exposure
TDG: Transportation of Dangerous Goods (Canada)
TWA: Time Weighted Average
US DOT: United States Department of Transportation
vPvB: very Persistent and very Bioaccumulative substance
WEL: Workplace Exposure Limit
WHMIS: Workplace Hazardous Materials Information System
Other abbreviations and acronyms can be looked up at www.wikipedia.org.

Key literature references and sources for data:

Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST)
Chemical Classification and Information Database (CCID)
European Chemicals Agency (ECHA) - Information on Chemicals
Hazardous Chemical Information System (HCIS)
National Institute of Technology and Evaluation (NITE)
Swedish Chemicals Agency (KEMI)
U.S. National Library of Medicine Toxicology Data Network (TOXNET)

Procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 [CLP] / GHS:

Classification	Classification procedure
Skin Sens. 1, H317	Calculation method
STOT RE 1, H372	Calculation method
Carc. 2, H351	Calculation method

Relevant H-statements:

H304: May be fatal if swallowed and enters airways.
H317: May cause an allergic skin reaction.
H351: Suspected of causing cancer.
H372: Causes damage to organs through prolonged or repeated exposure.
H412: Harmful to aquatic life with long lasting effects.

Hazard pictogram names: Health hazard; exclamation mark

Further information: None

Date of last revision: 4 November 2023

Changes to the SDS in this revision: Section 1.1.

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself. No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose. The user must make their own determination as to suitability.