

SAFETY DATA SHEET

in accordance with 1907/2006/EC (REACH, as amended by 453/2010/EC) and 29 CFR 1910.1200

Revision date: 28 September 2015 Initial date of issue: 6 July 2007 SDS No. 199-18

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

1.1. Product identifier

772 Premium Nickel Anti-Seize Compound (Bulk)

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

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

Supplier:

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): ProductMSDSs@chesterton.com

E-mail: customer.service@chesterton.com

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)

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 / GHS

STOT RE 1, H372 Carc. 2, H351 Skin Sens. 1, H317

2.1.2. Classification according to WHMIS 1988

D2A: Very toxic materials causing other effects, D2B: Toxic materials causing other effects

2.1.3. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

2.1.4. Additional information

For full text of R-phrases: 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 / GHS

Hazard pictograms:

 $\rangle\langle \hat{\cdot} \rangle$

Signal word: Danger

Hazard statements: H372 Causes damage to lungs through prolonged or repeated inhalation exposure.

H351 Suspected of causing cancer.

H317 May cause an allergic skin reaction.

Date: 28 September 2015 SDS No. 199-18

Precautionary statements: P201 Obtain special instructions before use.

P260 Do not breathe dust/mist.

P281 Use personal protective equipment as required.

P280 Wear protective gloves.

P308/313 IF exposed or concerned: Get medical advice/attention.
P362/364 Take off contaminated clothing and wash it before reuse.

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
White mineral oil (petroleum)	30-40	8042-47-5 232-455-8	NA	Asp. Tox. 1, H304
Nickel	20-24.9	7440-02-0 231-111-4	01-2119438 727-29	Carc. 2, H351 STOT RE 1, H372 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Other ingredients:				
Calcium carbonate	10-20	1317-65-3	NA	Not classified*
		215-279-6		
Graphite	7-13	7782-42-5	NA	Not classified*
·		231-955-3		

^{*}Substance with a workplace exposure limit.

For full text of H-statements: see SECTION 16.

¹ Classified according to: * 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F), California Proposition 65

* 1272/2008/EC, REACH

* WHMIS 2015

* Safe Work Australia [NOHSC: 1008 (2004)]

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.

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: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

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

Unsuitable extinguishing media: High volume water jet5.2. Special hazards arising from the substance or mixture

None

5.3. Advice for firefighters

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

Flammability Classification: -

HAZCHEM Emergency Action Code: 2

Date: 28 September 2015 SDS No. 199-18

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 should 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	ACGI	H TLV ²	UK \	NEL ³	AUSTR	ALIA ES ⁴ _
	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³
Nickel*	_	1	(inhal)	1.5	_	0.5	_	1
Calcium carbonate	(total) (resp)	15 5	(inhal)	10	(inhal) (resp)	10 4	_	10
Graphite*	(total) (resp)	15 5	(resp)	2	(inhal) (resp)	10 4	(resp)	3
Oil mist, mineral	_	5	(inhal)	5 (inhal)	-	-	-	5

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.

^{*}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 Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003].

Date: 28 September 2015 **SDS No.** 199-18

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 Odour mild odor Colour black **Odour threshold** no data available Initial boiling point not determined not determined Vapour pressure @ 20°C **Melting point** not determined % Aromatics by weight < 0.5%

% Volatile (by volume) 0% Hq not applicable

Flash point >138°C (>280°F) Relative density 1.47 kg/l Method PM Closed Cup Weight per volume 12.2 lbs/gal

Viscosity 1 million cps @25°C Coefficient (water/oil) < 1 **Autoignition temperature** not determined Vapour density (air=1) > 1 **Decomposition temperature** not applicable Rate of evaporation (ether=1) < 1 Upper/lower flammability or not determined Solubility in water insoluble

explosive limits

Flammability (solid, gas) not applicable Oxidising properties not applicable **Explosive 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 toxicological effects

Primary route of exposure Inhalation, skin and eye contact.

under normal use:

Acute toxicity -

Oral:

Substance	Test	Result
White mineral oil (petroleum)	LD50, rat	> 5000 mg/kg
Nickel	LD50, rat	> 9000 mg/kg
Calcium carbonate	LD50, rat	6450 mg/kg
Graphite	LD50, rat	> 2000 mg/kg

Dermal:

Substance	Test	Result
White mineral oil (petroleum)	LD50. rabbit	> 2000 mg/kg

Date: 28 September 2015 SDS No. 199-18

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.

Other information: 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.

Date: 28 September 2015 SDS No. 199-18

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. 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.

European List of Wastes code: 06 04 05

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

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

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

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

14.4. Packing group

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. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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: 313 Chemicals:

Immediate Nickel 7440-02-0 20-24.9%

Delayed

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.

Date: 28 September 2015 SDS No. 199-18

SECTION 16: OTHER INFORMATION

Abbreviations ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

and acronyms: ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE: Acute Toxicity Estimate BCF: Bioconcentration Factor

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

NOAEL: No Observed Adverse Effect Level

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)

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

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) 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 Commission de la santé et de la sécurité du travail (CSST)

and sources for data: Chemical Classification and Information Database (CCID)

European Chemicals Agency (ECHA) - Information on Chemicals

Hazardous Substances Information System (HSIS) 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
STOT RE 1, H372	Calculation method
Carc. 2, H351	Calculation method
Skin Sens. 1, H317	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

Changes to the SDS in this revision: Sections 2.1, 2.2, 3, 8.1, 15.1.2.

Revision date: 28 September 2015 **Further information:** None

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.