

SAFETY DATA SHEET

in accordance with 1907/2006/EC (REACH, as amended by 2015/830/EU) 29 CFR 1910.1200 and WHMIS 2015

Revision date: 24 September 2020 Initial date of issue: 19 April 2007 SDS No. 157B-29a

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

1.1. Product identifier

725 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

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

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 / GHS

Skin Sens. 1, H317

Carc. 2, H351 (inhalation)

STOT RE 1, H372 (lungs, inhalation)

Aquatic Chronic 3, H412

2.1.2. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

2.1.3. 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 / 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 lungs through prolonged or repeated inhalation exposure.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements: P201 Obtain special instructions before use. P264 Wash hands, face and any exposed skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P272 Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. P273 Wear protective gloves/clothing and eye protection. P280 IF ON SKIN: Wash with plenty of soap and water. P302/352 P308/313 IF exposed or concerned: Get medical advice/attention. P362/364 Take off contaminated clothing and wash it before reuse. Dispose of contents/container to an approved waste disposal plant. P501

Supplemental information: None

2.3. Other hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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3.2. Mixtures				
Hazardous Ingredients ¹	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification
Distillates (petroleum), hydrotreated heavy naphthenic**	35-45	64742-52-5 265-155-0	01-211946 7170-45	Asp. Tox. 1, H304
Nickel	25-30	7440-02-0 231-111-4	01-211943 8727-29	Carc. 2, H351 (inhalation) STOT RE 1, H372 (lungs, inhalation) Skin Sens. 1, H317 Aquatic Chronic 3, H412
Naphtha (petroleum), hydrotreated heavy*	1-3	64742-48-9 265-150-3	NA	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336
Methanol	0.1-0.3	67-56-1 200-659-6	01-211943 3307-44	Flam. Liq. 2, H225 Acute Tox. 3, H331, H311, H301 STOT SE 1, H370 Eye Irrit. 2A, H319
Other ingredients:				
Aluminum	5-10	7429-90-5 231-072-3	01-211952 9243-45	Not classified ^a
Graphite	1-5	7782-42-5 231-955-3	NA	Not classified***

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

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. Take off contaminated clothing and wash it before reuse. 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

High vapor concentrations and direct contact may cause eye and respiratory tract irritation. Prolonged or repeated skin contact may cause mild irritation. May cause skin sensitization as evidenced by rashes or hives.

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

Treat symptoms.

^{*}Contains less than 0.1 % w/w Benzene. **Contains less than 3 % DMSO extract as measured by IP 346.

^{***}Substance with a workplace exposure limit. ^a Not classified for flammability and water-reactivity based on the results of UN tests N.1 and N.5, respectively.

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, GHS, REACH

^{*} WHMIS 2015 * Safe Work Australia

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 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 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. Utilize exposure controls and personal protection as specified in Section 8. Remove contaminated clothing and wash before reuse. Contaminated work clothing should not be allowed out of the workplace.

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 ppm	PEL ¹ mg/m ³	ACGII ppm	H TLV ² mg/m ³	UK \ ppm	NEL ³ mg/m ³	AUSTR/ ppm	ALIA ES ⁴ mg/m ³
Oil mist, mineral	-	5	(inhal)	5	-	-	-	5
Nickel*	(total dust)	1	(inhal)	1.5	_	0.5	(total dust)	1
Naphtha (petroleum), hydrotreated heavy	-	-	_	_	_	_	_	_
Methanol	200	260	200 STEL:	(skin)	200 STEL:	266	200 (skin)	262
			250		250	333	STEL: 250	328
Aluminum*	(total) (resp)	15 5	(resp)	1	(inhal) (resp)	10 4	-	10
Graphite*	(total) (resp)	15 5	(resp)	2	(total) (resp)	10 4	(resp)	3

^{*}The nickel, aluminum 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]

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

Workers

Not available

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

Not available

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 approved organic vapor respirator (e.g.,

EN filter type A/P2).

Protective gloves: Chemical resistant gloves (e.g., nitrile rubber)

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical statepasteOdourpetroleum odorColourgrayOdour threshold

Initial boiling pointnot determinedVapour pressure @ 20°Cnot determinedMelting pointnot determined% Aromatics by weightapprox. 0.28%% Volatile (by volume)5%pHnot applicable

% Volatile (by volume)5%pHnot applicableFlash point95°C (204°F)Relative density1.29 kg/lMethodPM Closed CupWeight per volume10.7 lbs/galViscosity1 million cps @25°CCoefficient (water/oil)< 1</td>

Autoignition temperaturenot determinedVapour density (air=1)> 1Decomposition temperaturenot determinedRate of evaporation (ether=1)< 1</td>Upper/lower flammability ornot determinedSolubility in waternegligible

Flammability (solid, gas) not applicable Oxidising properties not determined

Explosive properties 9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available for the mixture. Nickel can react vigorously with acids to liberate hydrogen, which can form explosive mixtures with air.

10.2. Chemical stability

Stable

not applicable

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.

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 Inhal

Inhalation, skin and eye contact.

under normal use: Acute toxicity -

Oral:

Substance	Test	Result
Distillates (petroleum), hydrotreated	LD50, rat	> 5000 mg/kg, estimated
heavy naphthenic		
Nickel	LD50, rat	> 9000 mg/kg
Aluminum	LD50, rat	> 2000 mg/kg, read-
		across
Graphite	LD50, rat	> 2000 mg/kg
Methanol	LD50, rat	5628 mg/kg
Methanol	Human lethal dose	143 mg/kg
Naphtha (petroleum), hydrotreated	LD50, rat	> 15000 mg/kg
heavy		

Dermal:

Substance	Test	Result
Distillates (petroleum), hydrotreated	LD50, rat	> 2000 mg/kg, estimated
heavy naphthenic		
Naphtha (petroleum), hydrotreated	LD50, rabbit	> 3160 mg/kg
heavy		

Inhalation:

High vapor concentrations and direct contact may cause eye and respiratory tract irritation.

Substance	Test	Result
Distillates (petroleum), hydrotreated heavy naphthenic	LC50, rat, 4 hours	> 5 mg/l, estimated
Nickel	NOAEC, rat, 1 h	> 10.2 mg/l (dust)
Aluminum	LC50, rat, 4 hours	> 0.888 mg/l (dust)
Graphite	LC50, rat, 4 hours	> 2 mg/l (dust)
Methanol	LC50, mouse, 134 min.	79.43 mg/l

Skin corrosion/irritation:

Prolonged or repeated skin contact may cause mild irritation.

Substance	Test	Result
Distillates (petroleum), hydrotreated	Skin irritation, rabbit	Not irritating
heavy naphthenic		_
Aluminum	Skin irritation, rabbit	Not irritating
Graphite	Skin irritation, rabbit	Not irritating

Serious eye damage/ irritation:

Substance	Test	Result
Distillates (petroleum), hydrotreated	Eye irritation, rabbit	Not irritating
heavy naphthenic		

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Respiratory or skin sensitisation:

May cause skin sensitization as evidenced by rashes or hives.

Substance	Test	Result
Distillates (petroleum), hydrotreated	Skin sensitization, guinea	Not sensitizing
heavy naphthenic	pig	
Aluminum	Skin sensitization, guinea	Not sensitizing
	pig, read-across	
Graphite	Skin sensitization,	Not sensitizing
	(OECD 429), mouse	
Methanol	Skin sensitization, guinea	Not sensitizing
	pig	_

Germ cell mutagenicity: Distillates (petroleum), hydrotreated heavy naphthenic, Nickel, Aluminum, Graphite, Methanol:

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.

Reproductive toxicity: Distillates (petroleum), hydrotreated heavy naphthenic, Nickel, Aluminum, Graphite, Methanol:

based on available data, the classification criteria are not met.

STOT-single exposure: Distillates (petroleum), hydrotreated heavy naphthenic, Nickel, Aluminum, Graphite: based on

available data, the classification criteria are not met. Methanol: Causes damage to organs.

STOT-repeated exposure: Nickel: Causes damage to lungs through prolonged or repeated inhalation exposure. Aluminum,

Graphite, Methanol: based on available data, the classification criteria are not met.

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

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

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment (based on component data).

12.2. Persistence and degradability

Naphtha (petroleum), hydrotreated heavy, Distillates (petroleum), hydrotreated heavy naphthenic: inherently biodegradable (31% 3409 OECD 301F, 28 days). Nickel, Aluminum, Graphite: inorganic substances. Methanol: readily biodegradable.

12.3. Bioaccumulative potential

Distillates (petroleum), hydrotreated heavy naphthenic, Nickel, Aluminum, Graphite, Methanol: not expected to bioaccumulate.

12.4. Mobility in soil

Paste. Solubility in water: negligible. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9).

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.

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: NON-HAZARDOUS, NON REGULATED TDG: NON-HAZARDOUS, NON REGULATED US DOT: 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
 25-30%

 Delayed
 Aluminum
 7429-90-5
 5-10%

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.

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SECTION 16: OTHER INFORMATION

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

and acronyms: 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

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.

Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST) Key literature references

and sources for data:

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)

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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
Carc. 2, H351	Calculation method
STOT RE 1, H372	Calculation method
Aquatic Chronic 3, H412	Calculation method

Relevant H-statements: H225: Highly flammable liquid and vapour.

H226: Flammable liquid and vapour.

H228: Flammable solid. H301: Toxic if swallowed.

H304: May be fatal if swallowed and enters airways.

H311: Toxic in contact with skin. H315: Causes skin irritation.

H317: May cause an allergic skin reaction. H319: Causes serious eye irritation.

H331: Toxic if inhaled.

H336: May cause drowsiness or dizziness. H351: Suspected of causing cancer by inhalation.

H370: Causes damage to organs.

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

H411: Toxic to aquatic life with long lasting effects. H412: Harmful to aquatic life with long lasting effects.

H372D: Causes damage to the central nervous system through prolonged or repeated exposure.

Hazard pictogram names: Health hazard; exclamation mark

Changes to the SDS in this revision: Section 2.1.

Date of last revision: 24 September 2020

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.