



## Safety Data Sheet

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LOCTITE LB 771 known as LOCTITE NICKEL ANTI-SEIZE 771

SDS No. : 319450

V001.6

Date of issue: 12.05.2022

### Section 1. Identification of the substance/preparation and of the company/undertaking

**Product name:** LOCTITE LB 771 known as LOCTITE NICKEL ANTI-SEIZE 771

**Intended use:** Lubricant

**Supplier:**

Henkel Australia Pty Ltd  
135-141 Canterbury Road  
Kilsyth, Victoria, 3137  
Australia

Phone: +61 (3) 9724 6444

**Emergency information:** 24 HOUR EMERGENCY CONTACT NUMBER: 1800 032 379

### Section 2. Hazards identification

**Classification of the substance or mixture**

Hazardous according to the criteria of Safe Work Australia.

**GHS Classification:**

| <u>Hazard Class</u>                                | <u>Hazard Category</u> |
|--|------------------------|
| Serious eye irritation                             | Category 2A            |
| Skin sensitizer                                    | Category 1             |
| Carcinogenicity                                    | Category 2             |
| Target Organ Systemic Toxicant - Repeated exposure | Category 1             |
| Acute hazards to the aquatic environment           | Category 2             |
| Chronic hazards to the aquatic environment         | Category 3             |

**Hazard pictogram:**



**Signal word:** Danger

|                                    |  |
|------------------------------------|--|
| <b>Hazard statement(s):</b>        | H317 May cause an allergic skin reaction.<br>H319 Causes serious eye irritation.<br>H351 Suspected of causing cancer.<br>H372 Causes damage to organs through prolonged or repeated exposure.<br>H401 Toxic to aquatic life.<br>H412 Harmful to aquatic life with long lasting effects.  |
| <b>Precautionary Statement(s):</b> |  |
| <b>Prevention:</b>                 | P201 Obtain special instructions before use.<br>P202 Do not handle until all safety precautions have been read and understood.<br>P260 Do not breathe mist/vapours.<br>P264 Wash hands thoroughly after handling<br>P270 Do not eat, drink or smoke when using this product.<br>P272 Contaminated work clothing should not be allowed out of the workplace.<br>P273 Avoid release to the environment.<br>P280 Wear protective gloves/protective clothing/eye protection/face protection.           |
| <b>Response:</b>                   | P302+P352 IF ON SKIN: Wash with plenty of water.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P308+P313 IF exposed or concerned: Get medical advice/attention.<br>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.<br>P337+P313 If eye irritation persists: Get medical advice/attention.<br>P362+P364 Take off contaminated clothing and wash it before reuse. |
| <b>Storage:</b>                    | P405 Store locked up.  |
| <b>Disposal:</b>                   | P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.   |

**Dangerous Goods information:**

Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

**Section 3. Composition / information on ingredients**

**General chemical description:** Mixture

**Identity of ingredients:**

| Chemical ingredients  | CAS-No.    | Proportion |
|---|------------|------------|
| Nickel  | 7440-02-0  | 10- < 30 % |
| Graphite  | 7782-42-5  | < 10 %     |
| Mineral oil~  |            | 1- < 10 %  |
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts | 68649-42-3 | 1- < 3 %   |
| aluminium powder (stabilised)                                 | 7429-90-5  | < 10 %     |

**Section 4. First aid measures**

|                    |   |
|--------------------|---|
| <b>Ingestion:</b>  | Rinse mouth, do not induce vomiting, consult a doctor.  |
| <b>Skin:</b>       | Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing         |
| <b>Eyes:</b>       | Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary. |
| <b>Inhalation:</b> | Move to fresh air.  |

**First Aid facilities:** Eye wash  
Normal washroom facilities

**Medical attention and special treatment:** Treat symptomatically.

**Section 5. Fire fighting measures**

**Suitable extinguishing media:** Foam, extinguishing powder, carbon dioxide.

**Decomposition products in case of fire:** carbon oxides.  
Irritating organic vapours.

**Special protective equipment for fire-fighters:** Wear protective equipment.  
Wear self-contained breathing apparatus.

**Section 6. Accidental release measures**

**Personal precautions:** Danger of slipping on spilled product.  
Wear impervious gloves and chemical splash goggles.

**Environmental precautions:** Do not empty into drains / surface water / ground water.

**Clean-up methods:** Soak up with inert absorbent.  
Dispose of contaminated material as waste according to Section 13.

**Section 7. Handling and storage**

**Precautions for safe handling:** Ensure that workrooms are adequately ventilated.

**Conditions for safe storage:** Keep container tightly sealed.  
Store in a dry place.

**Section 8. Exposure controls / personal protection**

National exposure standards:

| Ingredient [Regulated substance]   | form of exposure | TWA (ppm) | TWA (mg/m3) | Peak Limit. (ppm) | Peak Limit. (mg/m3) | STEL (ppm) | STEL (mg/m3) |
|--|------------------|-----------|-------------|-------------------|---------------------|------------|--------------|
| NICKEL, POWDER<br>7440-02-0  |                  |           | 1           |                   |                     |            |              |
| NICKEL, SOLUBLE COMPOUNDS (AS NI)<br>7440-02-0   |                  |           | 0.1         |                   |                     |            |              |
| NICKEL, METAL<br>7440-02-0   |                  |           | 1           |                   |                     |            |              |
| GRAPHITE (ALL FORMSEXCEPT FIBRES) (RESPIRABLE DUST) (NATURAL & SYNTHETIC)<br>7782-42-5 | Respirable dust. |           | 3           |                   |                     |            |              |
| ALUMINIUM(METAL DUST)<br>7429-90-5   | Dust.            |           | 10          |                   |                     |            |              |

|  |       |  |   |  |  |  |  |
|--|-------|--|---|--|--|--|--|
| ALUMINIUM(WELDING FUMES)<br>(AS AL)<br>7429-90-5 | Fume. |  | 5 |  |  |  |  |
| ALUMINIUM, PYRO POWDERS (AS<br>AL)<br>7429-90-5  |       |  | 5 |  |  |  |  |

- Engineering controls:** Ensure good ventilation/extraction.
- Eye protection:** Wear chemical goggles.
- Skin protection:** Use of protective coveralls and long sleeves is recommended.  
Protective gloves made of rubber.
- Respiratory protection:** If inhalation risk exists, wear a respirator or air supplied mask complying with the requirements of AS/NZS 1715 and AS/NZS 1716.

### Section 9. Physical and chemical properties

- Appearance:** dark grey  
liquid
- Odor:** Hydrocarbon-like
- Flash point:** > 240 °C (> 464 °F)
- Density:** 1.1 g/cm<sup>3</sup>
- Solubility in water:** Insoluble

### Section 10. Stability and reactivity

- Stability:** Stable under normal conditions of temperature and pressure.
- Conditions to avoid:** Avoid ignition sources where dust is produced.
- Incompatible materials:** Strong oxidizing agents.  
Nickel powder can react explosively with substances such as ammonium nitrate, perchlorates, phosphorus, selenium, sulfur, etc...
- Hazardous decomposition products:** In case of fire toxic gases can be released.  
Irritating organic vapours.  
Oxides of carbon.

### Section 11. Toxicological information

**Health Effects:**

**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Skin:** May cause skin sensitization.

May cause skin irritation.

**Eyes:** May cause eye irritation.

**Inhalation:** Inhalation of dust generated by this material may cause respiratory tract irritation.

**Chronic effects:**

**Nickel  
7440-02-0:** Skin damage and respiratory dysfunctions after sensitisation; contact dermatitis, contact urticaria, allergic rhinitis and allergic asthma; active pneumonia, hyperplasia of the macrophages, alveolar proteinosis, fibrosis, hyperplasia of the bronchial lymph nodes and atrophy of the olfactory epithelium; carcinogenic potential, the lungs and nose are the target organs of the carcinogenicity of nickel and nickel compounds. Soluble Ni is quickly resorbed in the respiratory tract, percutaneous resorption is regarded as negligible.

**Carcinogenicity:** Suspected of causing cancer.

**Acute toxicity:**

| Hazardous components<br>CAS-No.   | Value<br>type | Value                        | Route of<br>application | Exposure<br>time | Species    | Method   |
|---|---------------|------------------------------|-------------------------|------------------|------------|--|
| Nickel<br>7440-02-0   | LD50          | > 9,000 mg/kg                | oral                    |                  | rat        | equivalent or similar to OECD<br>Guideline 401 (Acute Oral<br>Toxicity)                          |
| Graphite<br>7782-42-5   | LD50<br>LC50  | > 2,000 mg/kg                | oral<br>inhalation      | 4 h              | rat<br>rat | OECD Guideline 423 (Acute<br>Oral toxicity)<br>OECD Guideline 403 (Acute<br>Inhalation Toxicity) |
| Phosphorodithioic acid,<br>O,O-di-C1-14-alkyl<br>esters, zinc salts<br>68649-42-3 | LD50<br>LD50  | 2,230 mg/kg<br>> 2,000 mg/kg | oral<br>dermal          |                  | rat<br>rat | not specified<br>not specified   |
| aluminium powder<br>(stabilised)<br>7429-90-5                                     | LD50<br>LC50  | > 15,900 mg/kg<br>> 5 mg/l   | oral<br>inhalation      | 4 h              | rat<br>rat | equivalent or similar to OECD<br>Guideline 401 (Acute Oral<br>Toxicity)<br>not specified         |

**Skin corrosion/irritation:**

| Hazardous components<br>CAS-No.               | Result         | Exposure<br>time | Species | Method  |
|---|----------------|------------------|---------|---|
| Graphite<br>7782-42-5                         | not irritating | 4 h              | rabbit  | OECD Guideline 404 (Acute<br>Dermal Irritation / Corrosion) |
| aluminium powder<br>(stabilised)<br>7429-90-5 | not irritating | 24 h             | rabbit  | OECD Guideline 404 (Acute<br>Dermal Irritation / Corrosion) |

**Serious eye damage/irritation:**

| Hazardous components<br>CAS-No.               | Result         | Exposure<br>time | Species | Method   |
|---|----------------|------------------|---------|--|
| Graphite<br>7782-42-5                         | not irritating |                  | rabbit  | OECD Guideline 405 (Acute<br>Eye Irritation / Corrosion) |
| aluminium powder<br>(stabilised)<br>7429-90-5 | not irritating |                  | rabbit  | FDA Guideline  |

**Respiratory or skin sensitization:**

| Hazardous components<br>CAS-No.               | Result          | Test type                                      | Species    | Method  |
|---|-----------------|--|------------|---|
| Graphite<br>7782-42-5                         | not sensitising | Mouse<br>local<br>lymphnode<br>assay<br>(LLNA) | mouse      | equivalent or similar to OECD<br>Guideline 429 (Skin<br>Sensitisation: Local Lymph<br>Node Assay) |
| aluminium powder<br>(stabilised)<br>7429-90-5 | not sensitising | Draize<br>Test                                 | guinea pig | Draize Test   |

**Germ cell mutagenicity:**

| Hazardous components<br>CAS-No.               | Result                           | Type of study/<br>Route of<br>administration  | Metabolic<br>activation /<br>Exposure time               | Species    | Method  |
|---|----------------------------------|---|--|------------|---|
| Graphite<br>7782-42-5                         | negative<br>negative<br>negative | bacterial reverse<br>mutation assay (e.g.<br>Ames test)<br>in vitro mammalian<br>chromosome<br>aberration test<br>mammalian cell<br>gene mutation assay | with and without<br>with and without<br>with and without |            | OECD Guideline 471<br>(Bacterial Reverse Mutation<br>Assay)<br>OECD Guideline 473 (In vitro<br>Mammalian Chromosome<br>Aberration Test)<br>OECD Guideline 476 (In vitro<br>Mammalian Cell Gene<br>Mutation Test)                                      |
| aluminium powder<br>(stabilised)<br>7429-90-5 | positive<br>positive<br>negative | in vitro mammalian<br>cell micronucleus<br>test<br>in vitro mammalian<br>chromosome<br>aberration test<br>mammalian cell<br>gene mutation assay         | without<br>without<br>with and without                   |            | OECD Guideline 487 (In vitro<br>Mammalian Cell<br>Micronucleus Test)<br>equivalent or similar to OECD<br>Guideline 473 (In vitro<br>Mammalian Chromosome<br>Aberration Test)<br>OECD Guideline 476 (In vitro<br>Mammalian Cell Gene<br>Mutation Test) |
| aluminium powder<br>(stabilised)<br>7429-90-5 | negative<br>ambiguous            | oral: gavage<br>oral: gavage  |  | rat<br>rat | OECD Guideline 474<br>(Mammalian Erythrocyte<br>Micronucleus Test)<br>OECD Guideline 475<br>(Mammalian Bone Marrow<br>Chromosome Aberration Test)   |

**Repeated dose toxicity:**

| Hazardous components<br>CAS-No. | Result                 | Route of<br>application | Exposure time /<br>Frequency of<br>treatment | Species | Method   |
|---------------------------------|------------------------|-------------------------|--|---------|--|
| Graphite<br>7782-42-5           | NOAEL=ca. 813<br>mg/kg | oral: feed              | daily  | rat     | OECD Guideline 422<br>(Combined Repeated Dose<br>Toxicity Study with the<br>Reproduction / Developmental<br>Toxicity Screening Test) |

**Section 12. Ecological information**

**General ecological information:** Do not empty into drains / surface water / ground water.

**Toxicity:**

| Hazardous components CAS-No.  | Value type | Value                       | Acute Toxicity Study | Exposure time | Species                                   | Method   |
|---|------------|-----------------------------|----------------------|---------------|---|--|
| Nickel<br>7440-02-0   | LC50       | Toxicity > Water solubility | Fish                 | 96 h          | Brachydanio rerio (new name: Danio rerio) | OECD Guideline 203 (Fish, Acute Toxicity Test)             |
| Nickel<br>7440-02-0   | EC50       | Toxicity > Water solubility | Daphnia              | 48 h          | Daphnia magna                             | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Graphite<br>7782-42-5   | LC50       | > 10,000 mg/l               | Fish                 | 96 h          | Brachydanio rerio (new name: Danio rerio) | OECD Guideline 203 (Fish, Acute Toxicity Test)             |
| Graphite<br>7782-42-5   | EC50       | > 5,600 mg/l                | Daphnia              | 24 h          | Daphnia magna                             | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Mineral oil~  | LC50       | > 100 mg/l                  | Fish                 | 96 h          | Pimephales promelas                       | OECD Guideline 203 (Fish, Acute Toxicity Test)             |
| Mineral oil~  | EC50       | > 10,000 mg/l               | Daphnia              | 48 h          | Daphnia magna                             | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Mineral oil~  | EC50       | > 100 mg/l                  | Algae                | 72 h          | Scenedesmus quadricauda                   | OECD Guideline 201 (Alga, Growth Inhibition Test)          |
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts<br>68649-42-3 | LC50       | > 1 - 10 mg/l               | Fish                 | 96 h          | not specified                             | OECD Guideline 203 (Fish, Acute Toxicity Test)             |
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts<br>68649-42-3 | EC50       | > 1 - 10 mg/l               | Daphnia              | 48 h          | Daphnia magna                             | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |

**Persistence and degradability:**

| Hazardous components CAS-No.  | Result                     | Route of application | Degradability | Method  |
|---|----------------------------|----------------------|---------------|---|
| Mineral oil~  | not readily biodegradable. | aerobic              | 31 %          | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) |
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts<br>68649-42-3 | not readily biodegradable. | aerobic              | 5 %           | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test) |

**Section 13. Disposal considerations**

**Waste disposal of product:** Collection and delivery to recycling enterprise or other registered elimination institution.

**Recommended cleanser:** Solvent naphtha

**Disposal for uncleaned package:** Dispose of in accordance with local and national regulations.

**Section 14. Transport information**

**Road and Rail Transport:**

Dangerous Goods information: Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

**Marine transport IMDG:**

Not dangerous goods

**Air transport IATA:**

Not dangerous goods

**Section 15. Regulatory information**

SUSMP Poisons Schedule                      None

**Section 16. Other information**

**Abbreviations/acronyms:**                      GHS: Globally Harmonized System  
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations  
IMDG: International Maritime Dangerous Goods code  
STEL - Short term exposure limit  
TWA - Time weighted average  
AIIC - Australian Inventory of Industrial Chemicals (AIIC)  
AICIS - Australian Industrial Chemicals Introduction Scheme

**Reason for issue:**                                      Reviewed MSDS. Reissued with new date. involved chapters: 1-16

**Date of previous issue:**                                      18.05.2017

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