SECTION 1: Identification

1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade name</td>
<td>75.9 NI/14.0CR/10.1P(BNI-7)</td>
</tr>
<tr>
<td>Product code</td>
<td>A00000481</td>
</tr>
<tr>
<td>Product group</td>
<td>Trade product</td>
</tr>
</tbody>
</table>

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Lucas-Milhaupt Toronto
290 Carlingview Drive
M9W 5G1 Rexdale - Canada
T +1 (416) 675-1860
LM_SDInfo@lucasmilhaupt.com - www.lucasmilhaupt.com

1.4. Emergency telephone number

Emergency number: CHEMTREC Within the USA and Canada: 1-800-424-9300

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

<table>
<thead>
<tr>
<th>Classification (GHS CA)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin sensitisation, Category 1</td>
<td>H317</td>
</tr>
<tr>
<td>Carcinogenicity, Category 2</td>
<td>H351</td>
</tr>
<tr>
<td>Specific target organ toxicity — Repeated exposure, Category 1</td>
<td>H372</td>
</tr>
<tr>
<td>Hazardous to the aquatic environment — Acute Hazard, Category 1</td>
<td>H400</td>
</tr>
<tr>
<td>Combustible Dust</td>
<td></td>
</tr>
</tbody>
</table>

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

Hazard pictograms (GHS CA):

- !
- 
- 

Signal word (GHS CA): Danger

Hazard statements (GHS CA):

- May form combustible dust concentrations in air
  - H317 - May cause an allergic skin reaction.
  - H351 - Suspected of causing cancer.
  - H372 - Causes damage to organs through prolonged or repeated exposure.
  - H400 - Very toxic to aquatic life.

Precautionary statements (GHS CA):

- Obtain special instructions before use.
  - P201 - Do not handle until all safety precautions have been read and understood.
  - P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
  - P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
  - P264 - Wash hands, forearms and face 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.
  - P273 - Avoid release to the environment.
  - P280 - Wear protective gloves/protective clothing/eye protection/face protection.
  - P308+P313 - IF ON SKIN: Wash with plenty of water.
  - P308+P313 - IF exposed or concerned: Get medical advice/attention.
  - P314 - Get medical advice/attention if you feel unwell.
  - P315 - Specific treatment (see supplemental first aid instruction on this label)
  - P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
  - P362+P364 - Take off contaminated clothing and wash it before reuse.
  - P391 - Collect spillage.
  - P405 - Store locked up.
  - P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
2.3. Other hazards
No additional information available

2.4. Unknown acute toxicity (GHS CA)
No data available

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Chemical name / Synonyms</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS CA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel</td>
<td>Nickel metal / Nickel, elemental / Nickel, metal / C.I. 77775</td>
<td>(CAS-No.) 7440-02-0</td>
<td>74.5 - 77.3</td>
<td>Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372 Aquatic Acute 1, H400</td>
</tr>
<tr>
<td>Chromium</td>
<td>Chromium metal / Chromium, elemental / Chromium, metal / Chromium, metallic / Chromium (hexavalent)</td>
<td>(CAS-No.) 7440-47-3</td>
<td>13 - 15</td>
<td>Comb. Dust</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>Phosphorus / Red phosphorus / Phosphorus, red / Phosphorus, amorphous / Phosphorus (amorphous, red) / Phosphorus amorphous / Phosphorus red / Phosphorus (red) / Phosphorus elemental (red) / Phosphorus (red, yellow, white) / Phosphorus, yellow, elementary / Phosphorus (white) / Phosphorus (yellow)</td>
<td>(CAS-No.) 7723-14-0</td>
<td>9.7 - 10.5</td>
<td>Aquatic Acute 1, H400 Aquatic Chronic 3, H412</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of first-aid measures
- First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact: Wash skin with plenty of water. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact: Rinse eyes with water as a precaution.
- First-aid measures after ingestion: Rinse mouth. Call a physician immediately.
- First-aid measures general: Call a physician immediately.

4.2. Most important symptoms and effects (acute and delayed)
- Symptoms/effects after skin contact: May cause an allergic skin reaction.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment: Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media
- Suitable extinguishing media: Dry powder. Water spray. Foam.

5.2. Unsuitable extinguishing media
- Unsuitable extinguishing media: Water.

5.3. Specific hazards arising from the hazardous product
- Fire hazard: Flammable solid. May form combustible dust concentrations in air.

5.4. Special protective equipment and precautions for fire-fighters
- Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
No additional information available

6.2. Methods and materials for containment and cleaning up
- For containment: Collect spillage.
- Methods for cleaning up: Mechanically recover the product. Notify authorities if product enters sewers or public waters.
- Other information: Dispose of materials or solid residues at an authorized site.
6.3. Reference to other sections
For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid dust formation.

Hygiene measures: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Separate working clothes from town clothes. Launder separately.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures: Ground/bond container and receiving equipment.
Storage conditions: Keep cool. Protect from sunlight. Keep away from ignition sources. Store locked up. Store in a well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Chromium (7440-47-3)</th>
<th>USA - ACGIH</th>
<th>ACGIH TWA (mg/m³)</th>
<th>0.5 mg/m³ (inhalable particulate matter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA - OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Canada (Quebec)</td>
<td>OEL (mg/m³)</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Alberta</td>
<td>OEL TWA (mg/m³)</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>British Columbia</td>
<td>OEL TWA (mg/m³)</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Manitoba</td>
<td>OEL TWA (mg/m³)</td>
<td>0.5 mg/m³ (inhalable particulate matter)</td>
<td></td>
</tr>
<tr>
<td>New Brunswick</td>
<td>OEL TWA (mg/m³)</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Newfoundland &amp; Labrador</td>
<td>OEL TWA (mg/m³)</td>
<td>0.5 mg/m³ (inhalable particulate matter)</td>
<td></td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>OEL TWA (mg/m³)</td>
<td>0.5 mg/m³ (inhalable particulate matter)</td>
<td></td>
</tr>
<tr>
<td>Nunavut</td>
<td>OEL STEL (mg/m³)</td>
<td>1.5 mg/m³ (metal)</td>
<td></td>
</tr>
<tr>
<td>Nunavut</td>
<td>OEL TWA (mg/m³)</td>
<td>0.5 mg/m³ (metal)</td>
<td></td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>OEL STEL (mg/m³)</td>
<td>1.5 mg/m³ (metal)</td>
<td></td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>OEL TWA (mg/m³)</td>
<td>0.5 mg/m³ (metal)</td>
<td></td>
</tr>
<tr>
<td>Ontario</td>
<td>OEL TWA (mg/m³)</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>OEL TWA (mg/m³)</td>
<td>0.5 mg/m³ (inhalable particulate matter)</td>
<td></td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>OEL STEL (mg/m³)</td>
<td>1.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>OEL TWA (mg/m³)</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Yukon</td>
<td>OEL STEL (mg/m³)</td>
<td>3 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Yukon</td>
<td>OEL TWA (mg/m³)</td>
<td>0.1 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nickel (7440-02-0)</th>
<th>USA - ACGIH</th>
<th>ACGIH TWA (mg/m³)</th>
<th>1.5 mg/m³ (inhalable particulate matter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA - OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Canada (Quebec)</td>
<td>VEMP (mg/m³)</td>
<td>1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Alberta</td>
<td>OEL TWA (mg/m³)</td>
<td>1.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>British Columbia</td>
<td>OEL TWA (mg/m³)</td>
<td>0.05 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Manitoba</td>
<td>OEL TWA (mg/m³)</td>
<td>1.5 mg/m³ (inhalable particulate matter)</td>
<td></td>
</tr>
<tr>
<td>New Brunswick</td>
<td>OEL TWA (mg/m³)</td>
<td>1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Newfoundland &amp; Labrador</td>
<td>OEL TWA (mg/m³)</td>
<td>1.5 mg/m³ (inhalable particulate matter)</td>
<td></td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>OEL TWA (mg/m³)</td>
<td>1.5 mg/m³ (inhalable particulate matter)</td>
<td></td>
</tr>
<tr>
<td>Nunavut</td>
<td>OEL STEL (mg/m³)</td>
<td>3 mg/m³ (inhalable fraction)</td>
<td></td>
</tr>
</tbody>
</table>
8.2. Appropriate engineering controls

- Environmental exposure controls: Avoid release to the environment.
- Appropriate engineering controls: Ensure good ventilation of the work station.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state: Solid
- Appearance: No data available
- Colour: No data available
- Odour: No data available
- Odour threshold: No data available
- pH: No data available
- Relative evaporation rate (butylacetate=1): No data available
- Relative evaporation rate (ether=1): No data available
- Melting point: No data available
- Freezing point: Not applicable
- Boiling point: No data available
- Flash point: Not applicable
- Auto-ignition temperature: Not applicable
- Decomposition temperature: No data available
- Flammability (solid, gas): Flammable solid.
- Vapour pressure: No data available
- Vapour pressure at 50 °C: No data available
- Relative density: Not applicable
- Solubility: No data available
- Log Pow: No data available
- Explosive limits: Not applicable
9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Reactivity: Flammable solid.
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: No dangerous reactions known under normal conditions of use.
Conditions to avoid: Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. Avoid dust formation.
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity (oral): Not classified
Acute toxicity (dermal): Not classified
Acute toxicity (inhalation): Not classified
Nickel (7440-02-0)
LD50 oral rat: > 9000 mg/kg
LC50 inhalation rat (mg/l): > 10.2 mg/l (Exposure time: 1 h)
Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitization: May cause an allergic skin reaction.
Germ cell mutagenicity: Not classified
Carcinogenicity: Suspected of causing cancer.
Reproductive toxicity: Not classified
STOT-single exposure: Not classified
STOT-repeated exposure: Causes damage to organs through prolonged or repeated exposure.

Nickel (7440-02-0)
STOT-repeated exposure: Causing damage to organs through prolonged or repeated exposure.
Aspiration hazard: Not classified
Symptoms/effects after skin contact: May cause an allergic skin reaction.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Very toxic to aquatic life.
Acute aquatic toxicity: Very toxic to aquatic life.
Chronic aquatic toxicity: Not classified
Nickel (7440-02-0)
LC50 fish 1: > 100 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
LC50 fish 2: 1.3 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])
EC50 Daphnia 1: > 100 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Daphnia 2: 1 mg/l (Exposure time: 48 h - Species: Daphnia magna [static])
EC50 72h algae (1): 0.18 mg/l (Species: Pseudokirchneriella subcapitata)
EC50 96h algae (1): 0.174 - 0.311 mg/l (Species: Pseudokirchneriella subcapitata [static])
Phosphorus (7723-14-0)
LC50 fish 1: 0.0017 - 0.0035 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
LC50 fish 2: 0.001 - 0.004 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
Phosphorus (7723-14-0)

EC50 Daphnia 1
0.03 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Daphnia 2
0.025 - 0.037 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
BCF fish 1
< 200

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential

Phosphorus (7723-14-0)

BCF fish 1
< 200

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects

Ozone
: Not classified

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods
: Dispose of contents/container in accordance with licensed collector’s sorting instructions.

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

Transportation of Dangerous Goods
Not regulated for transport

14.2. Transport information/DOT

Department of Transport
Not regulated for transport

14.3. Air and sea transport

IMDG
Not regulated for transport

IATA
Not regulated for transport

SECTION 15: Regulatory information

15.1. National regulations

Chromium (7440-47-3)
Listed on the Canadian DSL (Domestic Substances List)

Nickel (7440-02-0)
Listed on the Canadian DSL (Domestic Substances List)

Phosphorus (7723-14-0)
Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

Chromium (7440-47-3)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on Turkish inventory of chemical
Nickel (7440-02-0)

- Listed on the AICS (Australian Inventory of Chemical Substances)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- Listed on the Korean ECL (Existing Chemicals List)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Listed on the United States TSCA (Toxic Substances Control Act) inventory
- Listed on INSQ (Mexican National Inventory of Chemical Substances)
- Listed on the United States TSCA (Toxic Substances Control Act) inventory

Phosphorus (7723-14-0)

- Listed on the AICS (Australian Inventory of Chemical Substances)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- Listed on the Korean ECL (Existing Chemicals List)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Listed on the United States TSCA (Toxic Substances Control Act) inventory
- Listed on INSQ (Mexican National Inventory of Chemical Substances)
- Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: Other information

Date of issue: 29 November 2017

Full text of H-statements:

- **H317**: May cause an allergic skin reaction.
- **H351**: Suspected of causing cancer.
- **H372**: Causes damage to organs through prolonged or repeated exposure.
- **H400**: Very toxic to aquatic life.
- **H412**: Harmful to aquatic life with long lasting effects.

SDS Canada (GHS)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.