Hazardous according to criteria of Australian Safety and Compensation Council

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
  - Product name: 50 µg/g Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn in 75 cSt Hydrocarbon Oil [100g bottle]
  - Part number: 5190-8709

- 1.2 Relevant identified uses of the substance or mixture and uses advised against
  No further relevant information available.

- Application of the substance / the mixture
  Reference material for laboratory use only

- Manufacturer/Supplier:
  Agilent Technologies Australia Pty Ltd
  679 Springvale Road
  Mulgrave
  Victoria 3170, Australia

- Further information obtainable from:
  e-mail: pdl-msds_author@agilent.com

- 1.4 Emergency telephone number:
  CHEMTREC®: +(61) - 290372994

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008
    health hazard

  Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

  Skin Sens. 1 H317 May cause an allergic skin reaction.

  Classification according to Directive 67/548/EEC or Directive 1999/45/EC

  Xn: Harmful
  R65: Harmful: may cause lung damage if swallowed.

  Xi: Sensitising
  R43: May cause sensitisation by skin contact.

  Information concerning particular hazards for human and environment:
  The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

  Classification system:
  The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- 2.2 Label elements
  - Labelling according to Regulation (EC) No 1272/2008
    The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)
Hazard pictograms

![Hazard pictogram](image)

Signal word: Danger

Hazard-determining components of labelling:
- White mineral oil
- Organo Nickel Compound

Hazard statements:
- H317 May cause an allergic skin reaction.
- H304 May be fatal if swallowed and enters airways.

Precautionary statements:
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P321 Specific treatment (see on this label).
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Information concerning particular hazards for human and environment:

Safety phrases:
- 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
- 24 Avoid contact with skin.
- 37 Wear suitable gloves.
- 60 This material and its container must be disposed of as hazardous waste.

2.3 Other hazards

Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Also contains substances at levels not considered to be hazardous.

Dangerous components:

<table>
<thead>
<tr>
<th>CAS: 8042-47-5</th>
<th>EINECS: 232-455-8</th>
<th>RTECS: PY8047000</th>
</tr>
</thead>
<tbody>
<tr>
<td>White mineral oil</td>
<td>Xn R65</td>
<td>Asp. Tox. 1, H304</td>
</tr>
<tr>
<td>Organo Nickel Compound</td>
<td>T Repr. Cat. 2 R49-61-48/23;</td>
<td>Xn R68; Xn R42/43; N R50/53</td>
</tr>
<tr>
<td>Carc. Cat. 1, Muta. Cat. 3</td>
<td>Resp. Sens. 1, H334; Muta. 2, H341; Carc. 1A, H350i; Repr. 1B, H360D; STOT RE 1, H372; Skin Sens. 1, H317</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Additional information: For the wording of the listed risk phrases refer to section 16.
SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation:
Supply fresh air and call a doctor.
In case of unconsciousness place patient in recovery position for transport.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing:
Rinse mouth. Do not induce vomiting.
Seek immediate medical advice.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable for surrounding conditions.

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

6.2 Environmental precautions:

Do not allow to enter sewers/surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/extraction at the workplace.
Store in cool, dry place in tightly closed receptacles.
Prevent formation of aerosols.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:
Store in a cool location.
Please refer to the manufacturer's certificate for specific storage and transport temperature conditions.
Store only in the original receptacle.
Keep container in a well-ventilated place. Keep away from sources of ignition and heat.

(Contd. from page 2)
Product name: 50 µg/g Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn in 75 cSt Hydrocarbon Oil [100g bottle]

- Information about storage in one common storage facility: Store away from foodstuffs.
- Further information about storage conditions: None.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- 8.1 Control parameters
  - Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - Additional information: Lists used were valid at the time of SDS preparation.
- 8.2 Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures:
      Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.
    - Respiratory protection:
      In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
    - Protection of hands:
      Chemical-resistant, impervious gloves with an approved standards should be worn at all times. The selection of the glove material is based on the penetration times, rates of diffusion and its degradation.

  - Material of gloves
    Natural rubber, NR
    Nitrile rubber, NBR
  - Penetration time of glove material
    The protection time of the gloves can not be accurately estimated for mixtures consisting of several substances
    Refer to and observe manufacturers break through times of the protective gloves.
  - Eye protection: Safety glasses

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
  - General Information
    - Form: Oily
    - Colour: Brown
    - Odour: Mineral-oil-like
    - Odour threshold: Not determined.
Product name: 50 µg/g Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn in 75 cSt Hydrocarbon Oil [100g bottle]

- **pH-value:** Not determined.

- **Change in condition**
  - Melting point/Melting range: Not determined.
  - Boiling point/Boiling range: 218 °C

- **Flash point:** 115 °C

- **Flammability (solid, gaseous):** Not determined.

- **Ignition temperature:**
  - Decomposition temperature: Not determined.

- **Self-igniting:** Product is not selfigniting.

- **Explosion limits:**
  - Lower: Not determined.
  - Upper: Not determined.

- **Vapour pressure:** Not determined.

- **Density at 20 °C:** 0.862 g/cm³
  - Relative density: Not determined.
  - Vapour density: Not determined.
  - Evaporation rate: Not determined.

- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**
  - Dynamic: Not determined.
  - Kinematic: Not determined.

### SECTION 10: Stability and reactivity

- **Reactivity** Stable under normal conditions.
- **Chemical stability** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:**
  - Formation of toxic gases is possible during heating or in case of fire.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid Heat.**
- **Incompatible materials:** Strong oxidizing agents.
- **Hazardous decomposition products:**
  - Formation of toxic gases is possible during heating or in case of fire.

### SECTION 11: Toxicological information

- **Information on toxicological effects** May be fatal if swallowed and enters airways.
Product name: 50 µg/g Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn in 75 cSt Hydrocarbon Oil [100g bottle]

- Acute toxicity:
  - LD/LC50 values relevant for classification:
    | Substance          | LD50/LC50 Value |
    |--------------------|-----------------|
    | 8042-47-5 White mineral oil | Oral LD50 > 5000 mg/kg (rat) |

- Primary irritant effect:
  - on the skin: May cause an allergic skin reaction.
  - on the eye: No irritating effect.
  - Sensitisation: Sensitisation possible through skin contact.

- Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  - Irritant

SECTION 12: Ecological information

- 12.1 Toxicity
  - Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability
  - No further relevant information available.
- 12.3 Bioaccumulative potential
  - No further relevant information available.
- 12.4 Mobility in soil
  - No further relevant information available.

- Additional ecological information:
  - General notes:
    - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
    - Do not allow undiluted product to reach ground water, water course or sewage system.
  - 12.5 Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - 12.6 Other adverse effects
    - No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation:
    - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
  - European waste catalogue:
    - Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
  - Uncleaned packaging:
    - Recommendation: Dispose of in accordance with national regulations.

SECTION 14: Transport information

- 14.1 UN-Number
  - ADG, ADN, IMDG, IATA: Not applicable
  - ADG, ADN, IMDG, IATA: Not applicable

- 14.3 Transport hazard class(es)
  - ADG, ADN, IMDG, IATA:
    - Class: Not applicable
Product name: 50 µg/g Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn in 75 cSt Hydrocarbon Oil [100g bottle]

### 14.4 Packing group
- ADG, IMDG, IATA: Not applicable

### 14.5 Environmental hazards:
- Marine pollutant: No

### 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.

### UN "Model Regulation":
- 

#### SECTION 15: Regulatory information

<table>
<thead>
<tr>
<th>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippines Inventory of Chemicals and Chemical Substances</td>
</tr>
<tr>
<td>8042-47-5 White mineral oil</td>
</tr>
<tr>
<td>Organo Silver Compound</td>
</tr>
<tr>
<td>Organo Aluminium Compound</td>
</tr>
<tr>
<td>Organo Boron Compound</td>
</tr>
<tr>
<td>Organo Chromium Compound</td>
</tr>
<tr>
<td>Organo Cadmium Compound</td>
</tr>
<tr>
<td>Organo Copper Compound</td>
</tr>
<tr>
<td>Organo Iron Compound</td>
</tr>
<tr>
<td>Organo Molybdenum Compound</td>
</tr>
<tr>
<td>Organo Nickel Compound</td>
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<tr>
<td>Organo Lead Compound</td>
</tr>
<tr>
<td>Organo Silicon Compound</td>
</tr>
<tr>
<td>Organo Vanadium Compound</td>
</tr>
<tr>
<td>Organo Zinc Compound</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Australian Inventory of Chemical Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>8042-47-5 White mineral oil</td>
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50 µg/g Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn in 75 cSt Hydrocarbon Oil [100g bottle]

**Standard for the Uniform Scheduling of Medicines and Poisons**

<table>
<thead>
<tr>
<th>Compound Type</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organo Silver Compound</td>
<td>S2</td>
</tr>
<tr>
<td>Organo Boron Compound</td>
<td>S4</td>
</tr>
<tr>
<td>Organo Lead Compound</td>
<td>S4+APPENDI</td>
</tr>
</tbody>
</table>

**15.2 Chemical safety assessment**: A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

The information contained in this document is based on Agilent’s state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

**Relevant phrases**

- H304 May be fatal if swallowed and enters airways.
- H317 May cause an allergic skin reaction.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H341 Suspected of causing genetic defects.
- H350i May cause cancer by inhalation.
- H360D May damage the unborn child.
- H372 Causes damage to organs through prolonged or repeated exposure.
- R42/43 May cause sensitisation by inhalation and skin contact.
- R48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.
- R49 May cause cancer by inhalation.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R61 May cause harm to the unborn child.
- R65 Harmful: may cause lung damage if swallowed.
- R68 Possible risk of irreversible effects.

**Abbreviations and acronyms:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
- Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
- Muta. 2: Germ cell mutagenicity, Hazard Category 2
- Carc. 1A: Carcinogenicity, Hazard Category 1A
- Repr. 1B: Reproductive toxicity, Hazard Category 1B
- STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1
- Asp. Tox. 1: Aspiration hazard, Hazard Category 1

**Sources**