1 Identification

- **Product name**
- **Trade name:** Nickel(II) 2-ethylhexanoate, 78% in 2-ethylhexanoic acid (10-15% Ni)
- **Item number:** 93-2830

2 Hazard(s) identification

- **Classification of the substance or mixture**
  The product is not classified according to the Globally Harmonized System (GHS).

- **Label elements**
  - **GHS label elements** not applicable
  - **Hazard pictograms** not applicable
  - **Signal word** not applicable
  - **Hazard statements** not applicable

- **Precautionary statements**
  - **P262** Do not get in eyes, on skin, or on clothing.
  - **P280** Wear protective gloves/protective clothing/eye protection/face protection.
  - **P305+P351+P338** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - **P304+P340** IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  - **P403+P233** Store in a well-ventilated place. Keep container tightly closed.
  - **P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**
  - **NFPA ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 0
    - Reactivity = 0
  - **HMIS-ratings (scale 0 - 4)**
    - Health = *0
    - Fire = 0
    - Reactivity = 0

- **Other hazards**
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.
Trade name: Nickel(II) 2-ethylhexanoate, 78% in 2-ethylhexanoic acid (10-15% Ni)

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4454-16-4 nickel-bis(2-ethylhexanoate)</td>
</tr>
<tr>
<td>149-57-5 2-ethylhexanoic acid</td>
</tr>
</tbody>
</table>

4 First-aid measures

- Description of first aid measures
  - General information: No special measures required.
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Immediately rinse with water.
  - After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
  - After swallowing: If symptoms persist consult doctor.
  - Information for doctor:
    - Most important symptoms and effects, both acute and delayed: No further relevant information available.
    - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents:
    - CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  - Special hazards arising from the substance or mixture: No further relevant information available.

- Advice for firefighters
  - Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Not required.
- Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Dispose contaminated material as waste according to item 13.
- 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.

7 Handling and storage

- Handling:
  - Precautions for safe handling: No special measures required.
  - Information about protection against explosions and fires: No special measures required.
### Conditions for safe storage, including any incompatibilities

### Storage:
No special requirements.

### Information about storage in one common storage facility:
Not required.

### Further information about storage conditions:
None.

### Specific end use(s)
No further relevant information available.

---

### 8 Exposure controls/personal protection

### Additional information about design of technical systems:
No further data; see item 7.

### Control parameters

#### Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit Value</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>4454-16-4 nickel-bis(2-ethylhexanoate)</td>
<td>Long-term value: 1 mg/m³ as Ni</td>
<td>PEL Long-term value: 0.015 mg/m³ as Ni; See Pocket Guide App. A</td>
</tr>
<tr>
<td>149-57-5 2-ethylhexanoic acid</td>
<td>Long-term value: 5* mg/m³ as inhalable fraction and vapor</td>
<td></td>
</tr>
</tbody>
</table>

### Additional information:
The lists that were valid during the creation were used as basis.

### Exposure controls

#### Personal protective equipment:

- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.

- **Breathing equipment:** Not required.

- **Protection of hands:**

  **Protective gloves**
  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

  Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

  Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

  **Material of gloves**
  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

  **Penetration time of glove material**
  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

  **Eye protection:** Goggles recommended during refilling.
### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
  - **Appearance:**
    - Form: Viscous
    - Color: Green
  - **Odor:** Acetone-like
  - **Odor threshold:** Not determined.
  - **pH-value:** Not determined.
- **Change in condition**
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not determined.
- **Ignition temperature:** 310 °C (590 °F)
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower: Not determined.
  - Upper: Not determined.
- **Vapor pressure:** Not determined.
- **Density:**
  - Not determined.
  - Relative density: Not determined.
  - Vapor 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.
- **Solvent content:**
  - Organic solvents: 21.2 %
  - VOC content: 21.2 %
  - 212.1 g/l / 1.77 lb/gl
- **Other information**
  - No further relevant information available.

### 10 Stability and reactivity

- **Reactivity**
  - No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions**
  - No dangerous reactions known.
II Toxicological information

- Information on toxicological effects
- Acute toxicity:

- LD/LC50 values that are relevant for classification:

| 149-57-5 2-ethylhexanoic acid | Oral LD50 3000 mg/kg (rat) | Dermal LD50 1260 mg/kg (rabbit) |

- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: No irritating effect.
  - Sensitization: No sensitizing effects known.

- Additional toxicological information:
  The product is not subject to classification according to internally approved calculation methods for preparations:
  When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- Carcinogenic categories

  - IARC (International Agency for Research on Cancer)
    4454-16-4 nickel-bis(2-ethylhexanoate) I
  
  - NTP (National Toxicology Program)
    4454-16-4 nickel-bis(2-ethylhexanoate) K
  
  - OSHA-Ca (Occupational Safety & Health Administration)
    None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - Behavior in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.

- Additional ecological information:
  - General notes: Not known to be hazardous to water.

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

- Other adverse effects: No further relevant information available.
13 Disposal considerations

· Waste treatment methods
  · Recommendation: Disposal must be made according to official regulations.

· Uncleaned packagings:
  · Recommendation: Disposal must be made according to official regulations.

14 Transport information

· UN-Number
  · DOT, ADN, IMDG, IATA: not regulated

· UN proper shipping name
  · DOT, ADN, IMDG, IATA: not regulated

· Transport hazard class(es)
  · DOT, ADN, IMDG, IATA
    · Class: not regulated

· Packing group
  · DOT, IMDG, IATA: not regulated

· Environmental hazards:
  · Marine pollutant: Yes

· Special precautions for user
  · Not applicable.

· Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
  · Not applicable.

· UN "Model Regulation": not regulated

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture
  · Sara
    · Section 355 (extremely hazardous substances):
      · None of the ingredients is listed.

    · Section 313 (Specific toxic chemical listings):
      · 4454-16-4 nickel-bis(2-ethylhexanoate)

    · TSCA (Toxic Substances Control Act):
      · All ingredients are listed.

· Proposition 65
  · Chemicals known to cause cancer:
    · 4454-16-4 nickel-bis(2-ethylhexanoate)

  · Chemicals known to cause reproductive toxicity for females:
    · None of the ingredients is listed.

  · Chemicals known to cause reproductive toxicity for males:
    · None of the ingredients is listed.
Trade name: Nickel(II) 2-ethylhexanoate, 78% in 2-ethylhexanoic acid (10-15% Ni)

- **Chemicals known to cause developmental toxicity:**
  None of the ingredients is listed.

- **Carcinogenic categories**
  - **EPA (Environmental Protection Agency)**
    None of the ingredients is listed.
  - **TLV (Threshold Limit Value established by ACGIH)**
    None of the ingredients is listed.
  - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
    None of the ingredients is listed.

- **GHS label elements** not applicable
- **Hazard pictograms** not applicable
- **Signal word** not applicable
- **Hazard statements** not applicable
- **Precautionary statements**
  - P262 Do not get in eyes, on skin, or on clothing.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  - P403+P233 Store in a well-ventilated place. Keep container tightly closed.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Technical Department.
- **Contact:** Technical Director
- **Date of preparation / last revision** 07/31/2016 / -
- **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
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - 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)
  - NFFA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit