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

- **1.1 Product identifier**
  - Trade name: Resin remover
  - SDS number: N-250

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

- **Application of the substance / the preparation:** Cleaner for Gardening cutter

- **1.3 Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    - NISHIGAKI INDUSTRIAL Co., LTD.
    - Sales division
    - Address: 500 OHMURA MIKI CITY HYOGO-PREF, JAPAN
    - TEL: +81>794-82-1000
    - FAX: +81>794-82-4844
    - E-mail: sales@ni-co.jp

  - **Further information obtainable from:** See section 16 (Contact)

- **1.4 Emergency telephone number:** +81>794-82-1000

SECTION 2: Hazards identification

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

  ![GHS05 corrosion]

  Skin Corr. 1A H314 Causes severe skin burns and eye damage.
  Eye Dam. 1 H318 Causes serious eye damage.

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

  ![GHS05]

- **Signal word** Danger

- **Hazard-determining components of labelling:**
  - Sodium hydroxide

- **Hazard statements**
  - H314 Causes severe skin burns and eye damage.

- **Precautionary statements**
  - **P260** Do not breathe dusts or mists.
  - **P303 + P361 + P335** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - **P305 + P351 + P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - **P310** Immediately call a POISON CENTER/doctor.
  - **P405** Store locked up.
  - **P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:**
  - 2% of the mixture consists of component(s) of unknown toxicity.
  - Contains 3% of components with unknown hazards to the aquatic environment.

(Contd. on page 2)
Trade name: Resin remover

- 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: Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th>(% by weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 111-76-2</td>
<td>Alcohols, C12-14-secondary, ethoxylated</td>
</tr>
<tr>
<td>EINECS: 203-905-0</td>
<td>2-butoxyethanol</td>
</tr>
<tr>
<td>Index number: 603-014-00-0</td>
<td>□ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319</td>
</tr>
<tr>
<td>CAS: 112-80-1</td>
<td>oleic acid, pure</td>
</tr>
<tr>
<td>EINECS: 204-007-1</td>
<td>□ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335</td>
</tr>
<tr>
<td>CAS: 1310-73-2</td>
<td>Sodium hydroxide</td>
</tr>
<tr>
<td>EINECS: 215-185-5</td>
<td>□ Skin Corr. 1A, H314; □ Acute Tox. 4, H302</td>
</tr>
<tr>
<td>Index number: 011-002-00-6</td>
<td></td>
</tr>
<tr>
<td>CAS: 7732-18-5</td>
<td>Water</td>
</tr>
<tr>
<td>EINECS: 231-791-2</td>
<td></td>
</tr>
</tbody>
</table>

- Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures
  - After inhalation:
    Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
  - After skin contact:
    Remove contaminated clothing and shoes. Immediately wash with water and soap and rinse thoroughly. If skin abnormality such as itching or pain etc. arises, refer for medical attention.
  - After eye contact:
    Rinse opened eyes for several minutes under running water. Then consult a doctor. During the eyewash, open the eyelids well with fingers and ask the victim to look up, down and side-to-side in order to reach water all parts of eyes.
  - After swallowing:
    Rinse out mouth with water. Call a doctor immediately.

- 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
- 5.2 Special hazards arising from the substance or mixture: Carbon monoxide (CO)
- 5.3 Advice for firefighters
  - Protective equipment: Fire fighting should be done from up-wind with proper protective equipment.
Additional information
Dry chemical powder, carbon dioxide or dry sand should be used for small fires. Foam extinguisher is effective for a large scale fire.
Move containers to safe area if possible.
In case of fire in the surrounding area, cool containers and surroundings with the water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.

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).
Use neutralising agent.
Dispose 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/exhaustion at the workplace.
Wear proper protective equipment to avoid contact and inhalation.
After handling, Wash hands thoroughly.

7.2 Conditions for safe storage, including any incompatibilities

- Storage:
  - Requirements to be met by storerooms and receptacles:
    Keep away from heat and sunlight.
    Keep away water and moisture.
  - Information about storage in one common storage facility:
    Keep away from incompatible materials. (Refer to SECTION 10)
  - Further information about storage conditions:
    Keep container tightly sealed.

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:

<table>
<thead>
<tr>
<th>111-76-2 2-butoxyethanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOELV</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Skin</td>
</tr>
</tbody>
</table>

- Additional information: The lists valid during the making were used as basis.

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.
Avoid contact with the eyes and skin.

- **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.

- **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:**
  Tightly sealed goggles

- **Body protection:** Alkaline resistant protective clothing

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**SECTION 9: Physical and chemical properties**

- **9.1 Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - Form: Liquid
    - Colour: Clear
    - Odour: No data
    - Odour threshold: Not determined.
  - **pH-value:** 12.5
  - **Change in condition**
    - Melting point/freezing point: Undetermined.
    - Initial boiling point and boiling range: ca. 100 °C
  - **Flash point:** Not applicable.
  - **Flammability (solid, gas):** Not applicable.
  - **Ignition temperature:**
    - Decomposition temperature: Not determined.
    - Auto-ignition temperature: Product is not selfigniting.
  - **Explosive properties:**
    - Product does not present an explosion hazard.
  - **Explosion limits:**
    - Lower: Not determined.

(Contd. on page 5)
Trade name: Resin remover

Upper:
- Vapour pressure: Not determined.
- Density:
  - Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.
- Solubility in / Miscibility with water: Soluble
- Partition coefficient: n-octanol/water: Not determined.
- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- 9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity: No further relevant information available.
- 10.2 Chemical stability:
  - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions: May react with incompatible materials.
- 10.4 Conditions to avoid: Sunlight, heat
- 10.5 Incompatible materials: Strong oxidizing agent, strong base, strong acid, metals, food and feed etc.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity: Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LD50 Dermal (rab)</th>
<th>LD50 Oral (pure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2 2-butoxyethanol</td>
<td>1,480 mg/kg (rat)</td>
<td>400 mg/kg (rab)</td>
<td>74,000 mg/kg (rat)</td>
<td></td>
</tr>
</tbody>
</table>

- Primary irritant effect:
- Skin corrosion/irritation: Causes severe skin burns and eye damage.
- Serious eye damage/irritation: Causes serious eye damage.
- Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.
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 to water
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    Must not reach sewage water or drainage ditch undiluted or unneutralised.
    Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high
    pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so
    that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
- 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 together with household garbage. Do not allow product to reach sewage system.
    Waste material should be processed such as stabilization or neutralization to be a lower hazardous state as
    much as possible before being disposed of.
  - Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

- 14.1 UN-Number
  - ADR, IMDG, IATA UN3267
- 14.2 UN proper shipping name
  - ADR 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. mixture
  - IMDG, IATA CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. mixture
- 14.3 Transport hazard class(es)
  - ADR, IMDG, IATA
    - Class 8 Corrosive substances.
    - Label 8
- 14.4 Packing group
  - ADR, IMDG, IATA 1
- 14.5 Environmental hazards:
  - Not applicable.
- 14.6 Special precautions for user
  - Warning: Corrosive substances.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: Resin remover

<table>
<thead>
<tr>
<th>Danger code (Kemler):</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS Number:</td>
<td>F-A,S-B</td>
</tr>
<tr>
<td>Segregation groups</td>
<td>Alkalis</td>
</tr>
<tr>
<td>Stowage Category</td>
<td>B</td>
</tr>
<tr>
<td>Stowage Code</td>
<td>SW2 Clear of living quarters.</td>
</tr>
<tr>
<td>Segregation Code</td>
<td>SG35 Stow &quot;separated from&quot; acids.</td>
</tr>
</tbody>
</table>

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

Transport/Additional information:

ADR
- Limited quantities (LQ)
- Excepted quantities (EQ) Code: E0
  Not permitted as Excepted Quantity
- Transport category 3
- Tunnel restriction code E

IMDG
- Limited quantities (LQ)
- Excepted quantities (EQ) Code: E0
  Not permitted as Excepted Quantity

UN "Model Regulation":
UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. MIXTURE, 8, I

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

- Relevant phrases
  H302 Harmful if swallowed.
  H312 Harmful in contact with skin.
  H314 Causes severe skin burns and eye damage.
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  H332 Harmful if inhaled.
  H335 May cause respiratory irritation.

- Contact:
  NISHIGAKI INDUSTRIAL Co.,LTD.
  TEL: +81>794-82-1000

- 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)
<table>
<thead>
<tr>
<th>Property</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50</td>
<td>Lethal concentration, 50 percent</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal dose, 50 percent</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>vPvB</td>
<td>very Persistent and very Bioaccumulative</td>
</tr>
<tr>
<td>Acute Tox. 4</td>
<td>Acute toxicity – Category 4</td>
</tr>
<tr>
<td>Skin Corr. 1A</td>
<td>Skin corrosion/irritation – Category 1A</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation – Category 2</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation – Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation – Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity (single exposure) – Category 3</td>
</tr>
</tbody>
</table>

(Cond. of page 7)