1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: LEAD FREERITE NHF-01

MANUFACTURE

Company Name: TAMURA CORPORATION
Address: 16-2, Sayamagahara, Iruma-shi, Saitama, 358-8501, Japan
Phone Number: +81-4-2934-6131
Emergency Phone Number: +81-4-2934-6134
FAX Number: +81-4-2934-6559

2. HAZARDS IDENTIFICATION

GHS Classification: Flammable liquid – Category 2
Acute toxicity – Category 4 (inhalation)
Serious eye damage/eye irritation – Category 2
Sensitization – Category 1 (respiratory/skin)
Toxic to reproduction – Category 2
Specific target organ toxicity (single exposure)
– Category 1, 3
Specific target organ toxicity (repeated exposure)
– Category 2
Aquatic toxicity – Category 3 (acute/chronic)

Labelling:
Symbol: Flame, Health hazard, Exclamation mark
Signal word: DANGER!
Hazard statement:
Highly flammable liquid and vapour.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause respiratory irritation.
Suspected of damaging fertility or the unborn child.
Causes damage to central nervous systems/kidney/systemic toxicity.
May cause damage to blood vessel/liver/spleen through prolonged or repeated exposure.
Harmful to aquatic life with long lasting effects.
Precautionary statements: Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, sparks, open flames, or hot surfaces.
No smoking.
Keep container tightly closed.
Use explosion-proof electrical/ventilating/lighting equipment.
Avoid breathing mist/vapours/spray.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.
Wear protective gloves, eye protection and face protection.
Use personal protective equipment as required.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>Chemical Name &amp; Common Names</th>
<th>CAS No.</th>
<th>ACGIH TLV-TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>modified resin</td>
<td>trade secret</td>
<td>13.7</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>isopropyl alcohol</td>
<td>67-63-0</td>
<td>84.8</td>
<td>200 ppm</td>
<td></td>
</tr>
<tr>
<td>activator (organic)</td>
<td>trade secret</td>
<td>1.5</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*OPTIONAL    N/A : Not applicable

4. FIRST AID MEASURES

Ingestion: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.

Skin: Remove or Take off immediately all contaminated clothing and wash before re-use. Wash with plenty of soap and water.
Call a POISON CENTER or doctor if you feel unwell.
Get medical advice and attention if skin irritation or rash occurs.

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if inhaled/experiencing respiratory symptoms.

Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice and attention if eye irritation persists.
5. FIRE FIGHTING MEASURES
Flammability of the product: Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Flash point: > 11.7°C (by Tag closed cup)

6. ACCIDENTAL RELEASE MEASURES
Safety precaution: Ventilate the area and evacuate personnel. Wear appropriate PPE. Remove sources of ignition.

Small spillage: Absorb with sand, earth or other suitable absorbent and remove to a safe place for disposal.

Large spillage: Avoid entry into drains, ditches, streams or rivers by use of sand or earth. Transfer to salvage tank if possible, otherwise treat as small spillage. Inform local authorities if contamination enters watercourses or drains.

7. HANDLING AND STORAGE
Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapors. Use approved respiratory if air contamination is above accepted level. Wear full protective clothing for prolonged exposure and / or high concentrations. Follow the principles of good occupational hygiene to control personal exposures.

Flammable / combustible. Keep away from oxidizers, heat and flames. May attack some plastics, rubber and coatings. Keep in cool, dry, ventilated storage and closed containers. Ground container and transfer equipment to eliminate static electric sparks.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION
Exposure controls
Exposure limits: See section 3

Consult local authorities for acceptable exposure limits.
Hygiene measures: Always wash thoroughly after handling chemicals, especially before eating, drinking and smoking.
9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance       : Clear, light yellow liquid
Odor             : N/I
Boiling point    : > 82°C
Melting point    : < -80°C
Flash point      : > 11.7°C (by Tag closed cup)
Vapor pressure   : Approx. 4.3 kPa (at 20°C)
Vapor density    : N/I
Solubility in water : Insoluble
Density          : Approx. 0.820 g/cm³ (at 20°C)
pH               : N/I

10. STABILITY AND REACTIVITY

Stability        : Stable
Conditions to avoid : Sources of ignition, flames, sparks, moisture and heat.
Materials to avoid : Oxidizing agents, nitric acid.
Hazardous decomposition products : Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>CAS number</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>isopropyl alcohol</td>
<td>67-63-0</td>
<td>LD₅₀ Oral Rat</td>
<td>1870-5500 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD₅₀ Dermal Rabbit</td>
<td>4059-12870 mg/kg</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Carcinogenicity

Classification

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>CAS number</th>
<th>ACGIH</th>
<th>IARC</th>
<th>EPA</th>
<th>NIOSH</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>isopropyl alcohol</td>
<td>67-63-0</td>
<td>A4</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Personal protection

Respiratory : Use in a well ventilated area with local exhaust ventilation if necessary to control exposure. Avoid use in confined spaces. Use appropriate respiratory protective equipment if the above limits may be exceeded.

Hand       : Solvent resistant gloves
Eye        : Safety goggles
Skin       : Overalls and boots
Hygiene measures : Always wash thoroughly after handling chemicals.
12. ECOLOGICAL INFORMATION

Aquatic ecotoxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>CAS number</th>
<th>Test</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>modified resin</td>
<td>proprietary Intoxication</td>
<td>Acute EC₅₀</td>
<td>Daphnia magna</td>
<td>48 hours</td>
<td>4.5 mg/L</td>
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<tr>
<td>isopropyl alcohol</td>
<td>67-63-0</td>
<td>Mortality</td>
<td>Acute LC₅₀</td>
<td>Oryzias latipes</td>
<td>96 hours</td>
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</tbody>
</table>

13. DISPOSAL CONSIDERATIONS
Via an authorized waste disposal contractor to an approved waste disposal site, observing all local and national regulations. Container as substance, not to be cut up or punctured until completely purged of product residues. Consult an environmental engineer.

14. TRANSPORT INFORMATION
Information approved for the carriage of dangerous goods.

UN Number : 1993
Proper shipping name : Flammable liquid, n.o.s. (Isopropyl alcohol)
Class : 3
Packing Group : II
Additional information: ERG# 128

15. REGULATORY INFORMATION
HS Code : 3810.90 000

16. OTHER INFORMATION
Legal disclaimer : The information contained in this data sheet does not constitute an assessment of workplace risks. The above information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith, no warranty is implied with the respect to the quality or the specification of the product. The user must satisfy himself that the product is entirely suitable for his purpose.