SAFETY DATA SHEET
PIHAN HUOLTOPESU

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

1.1 Product identifier
Product name : PIHAN HUOLTOPESU
Product description : Detergent.

1.2 Relevant identified uses of the substance or mixture and uses advised against
Recommended use: Cleaning

1.3 Details of the supplier of the safety data sheet
Manufacturer or Distributor
Tikkurila Oyj
P.O. Box 53
FI-01301 VANTAA
FINLAND
Telephone +358 20 191 2000
E-mail address of person responsible for this SDS : Tikkurila Oyj, Product Safety, e-mail: productsafety@tikkurila.com

1.4 Emergency telephone number
Supplier or Manufacturer
Telephone number : 112 (24h)
Tikkurila Oyj
+358 20 191 2000 (GMT +2) Mon-Fri 8-16

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Product definition : Mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
Eye Irrit. 2, H319
The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

2.2 Label elements
Hazard pictograms : !

Signal word : Warning
Hazard statements : H319 - Causes serious eye irritation.
Precautionary statements
General : P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.
Prevention : P280 - Wear protective gloves.
Response : P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes.
Storage : Not applicable.
### Disposal
Not applicable.

### Supplemental label elements
Not applicable.

### EU Detergents Regulation
less than 5%: non-ionic surfactants, anionic surfactants, phosphates.

#### 2.3 Other hazards
Other hazards which do not result in classification: None known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Identifiers</th>
<th>Concentration</th>
<th>Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrapotassium pyrophosphate</td>
<td>REACH #: 01-2119489369-18 EC: 200-578-6 CAS: 68891-38-3</td>
<td>≤3</td>
<td>Eye Irrit. 2, H319</td>
<td>-</td>
</tr>
<tr>
<td>Alcohols, C10-16, ethoxylated, sulfates, sodium salts</td>
<td>REACH #: 01-2119488639-16 EC: 500-743-4 CAS: 68891-38-3</td>
<td>≤3</td>
<td>Skin Irrit. 2, H315 Eye Irrit. 2, H319</td>
<td>-</td>
</tr>
<tr>
<td>Alcohol</td>
<td>REACH #: 01-2119457610-43 EC: 64-17-5 Index: 603-002-00-5</td>
<td>≤3</td>
<td>Flam. Liq. 2, H225</td>
<td>See Section 16 for the full text of the H statements declared above.</td>
</tr>
</tbody>
</table>

**Notes:** There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

**Occupational exposure limits, if available, are listed in Section 8.**

### Notes, if applicable, refer to Notes given in Annex VI of 1272/2008/EC.
SECTION 4: First aid measures

4.1 Description of first aid measures

General: In all cases of doubt, or when symptoms persist, seek medical attention. Show this safety data sheet or label to the doctor if possible.

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of lukewarm water, keeping eyelids open. Continue to rinse for at least 15 minutes. Get medical attention if symptoms occur.

Inhalation: Remove to fresh air.

Skin contact: Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion: If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious). If significant amounts have been swallowed or if symptoms persist, seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation. See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire. Recommended: Alcohol resistant foam, CO₂, powders or water spray/mist.

Unsuitable extinguishing media: Do not use a direct water jet that could spread the fire.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture: This product is not classified as flammable. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous combustion products: When exposed to high temperatures, hazardous decomposition products may be produced, such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

5.3 Advice for firefighters

Special protective actions for fire-fighters: Use water spray to keep fire-exposed containers cool. Do not release runoff from fire to drains or watercourses.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid breathing vapor or mist. Avoid direct skin contact with product. See Section 8 for information on appropriate personal protective equipment.

6.2 Environmental precautions

Undiluted product is not allowed to enter drains or watercourses.

6.3 Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Preferably clean with water or detergent. Avoid using solvents.
SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid breathing vapor. Avoid inhalation of dust from sanding. See Section 8 for information on appropriate personal protective equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled and stored. Wash hands before breaks and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities
Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature is +5°C ...+25°C. Do not allow to freeze. Store in accordance with local regulations.

7.3 Specific end use(s)
None.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Occupational exposure limits
No exposure limit value known.

Recommended monitoring procedures
If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

DNELs/DMELs
No DNELs/DMELs available.

PNECs
No PNECs available.

8.2 Exposure controls
Appropriate engineering controls
Provide adequate ventilation. Comply with the health and safety at work laws.

Individual protection measures

Eye/face protection
Use safety eyewear designed to protect against splash of liquids (EN166).

Hand protection
Wear protective gloves. Gloves should be replaced regularly and if there is any sign of damage to the glove material. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
Recommended glove material (EN374):
< 1 hour (breakthrough time): nitrile rubber
4 - 8 hours (breakthrough time): butyl rubber
> 8 hours (breakthrough time): laminated foil
Not recommended: PVA gloves

Skin protection
Wear appropriate personal protective clothing to prevent skin contact.

Respiratory protection
A respirator is not needed under normal and intended conditions of product use.
Wear a respirator with type P2 filter during sanding (EN149:2001). Be sure to use an approved/certified respirator or equivalent. Check that mask fits tightly and change filter regularly.
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance
- Physical state: Liquid.
- Color: Clear.
- Odor: Mild.
- Odor threshold: Not relevant for the hazard assessment of the product.
- pH: 10.5
- Melting point/freezing point: -114°C (ethanol)
- Initial boiling point and boiling range: 78,29°C (ethanol)
- Flash point: Closed cup: 64°C
- Evaporation rate: 1,7 (butyl acetate = 1) (ethanol)
- Flammability (solid, gas): Not applicable. Product is a liquid.
- Upper/lower flammability or explosive limits: Lower: 3,3% (ethanol) Upper: 19% (ethanol)
- Vapor pressure: 5,7 kPa [room temperature] (ethanol)
- Vapor density: 1,6 (ethanol)
- Density: 1 g/cm³
- Solubility(ies): Miscible in water.
- Partition coefficient: n-octanol/water: Not available.
- Auto-ignition temperature: 455°C (ethanol)
- Decomposition temperature: Not relevant for the hazard assessment of the product.
- Viscosity: 9 s [ISO 6mm cup]
- Explosive properties: No explosive ingredients present.
- Oxidizing properties: No oxidizing ingredients present.

9.2 Other information
No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity
- See Section 10.5.

10.2 Chemical stability
- Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions
- Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid
- Avoid extreme heat and freezing.

10.5 Incompatible materials
- Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong acids, strong alkalis.

10.6 Hazardous decomposition products
- When exposed to high temperatures, hazardous decomposition products may be produced, such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.
SECTION 11: Toxicological information

11.1 Information on toxicological effects
There is no testdata available on the product itself. The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Long term exposure by inhalation may cause respiratory tract irritation. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>alcohols, C12-14, ethoxylated</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>300 to 2000 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Not classified.

Irritation/Corrosion

Causes serious eye irritation.

Sensitization

Not classified.

Mutagenicity

Not classified.

Carcinogenicity

Not classified.

Reproductive toxicity

Not classified.

Teratogenicity

Not classified.

Specific target organ toxicity (single exposure)

Not classified.

Specific target organ toxicity (repeated exposure)

Not classified.

Aspiration hazard

Not classified.

SECTION 12: Ecological information

Ecological testing has not been conducted on this product. Do not allow undiluted product to enter drains, water courses or soil.

The product is not classified as environmentally hazardous according to Regulation (EC) 1272/2008.

The surfactants contained in this mixture comply with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>alcohols, C12-14, ethoxylated</td>
<td>EC10 &gt;0,1 mg/l</td>
<td>Algae</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>EC50 &gt;1 mg/l</td>
<td>Algae</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>EC50 &gt;1 mg/l</td>
<td>Daphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>LC50 &gt;1 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>alcohols, C12-14, ethoxylated, sulfates, sodium salts</td>
<td>EC50 7,4 mg/l</td>
<td>Daphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>IC50 10 mg/l</td>
<td>Algae</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>LC50 7,1 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
</tbody>
</table>
12.2 Persistence and degradability

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Result</th>
<th>Dose</th>
<th>Inoculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohols, C12-14, ethoxylated</td>
<td>OECD 301B</td>
<td>&gt;60 % - Readily - 28 days</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohols, C12-14, ethoxylated</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Amides, coco, N,N-bis (hydroxyethyl)</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Alcohols, C12-14, ethoxylated, sulfates, sodium salts</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
</tbody>
</table>

Biodegradability report: Not available.

12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogPow</th>
<th>Bioconcentration factor [BCF]</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohols, C12-14, ethoxylated, sulfates, sodium salts</td>
<td>0,3</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Ethanol</td>
<td>-0,35</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

- Soil/water partition coefficient (KOC): Not available.
- Mobility: Not available.

12.5 Results of PBT and vPvB assessment

- PBT: Not applicable.
- vPvB: Not applicable.

12.6 Other adverse effects: Not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Product

  Methods of disposal: Remove as much product as possible from the tools before cleaning. Undiluted liquid residue must not be emptied into drains or sewage system, but handled in accordance with national regulations. Product residues should be left at special companies which have permission for gathering this kind of wastes.

- European waste catalogue (EWC)

<table>
<thead>
<tr>
<th>Waste code</th>
<th>Waste designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 01 29*</td>
<td>detergents containing hazardous substances</td>
</tr>
</tbody>
</table>

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

Packaging
SECTION 14: Transport information

This product is not regulated for carriage according to ADR/RID, IMDG, IATA.

<table>
<thead>
<tr>
<th></th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.3 Transport hazard class(es)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.4 Packing group</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>Additional information</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

14.6 Special precautions for user: Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- EU Regulation (EC) No. 1907/2006 (REACH)
- Other EU regulations

Europe inventory: All components are listed or exempted.

15.2 Chemical Safety Assessment: This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

- Indicates information that has changed from previously issued version.

Abbreviations and acronyms:
- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
</table>

Version: 2
Eye Irrit. 2, H319

Full text of abbreviated H statements

H225  Highly flammable liquid and vapor.
H302  Harmful if swallowed.
H315  Causes skin irritation.
H318  Causes serious eye damage.
H319  Causes serious eye irritation.
H412  Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4, H302  ACUTE TOXICITY (oral) - Category 4
Aquatic Chronic 3, H412  AQUATIC HAZARD (LONG-TERM) - Category 3
Eye Dam. 1, H318  SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2, H319  SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Liq. 2, H225  FLAMMABLE LIQUIDS - Category 2
Skin Irrit. 2, H315  SKIN CORROSION/IRRITATION - Category 2

Date of issue/Date of revision: 19-04-2017
Date of previous issue: 12-10-2016
Version: 2

Notice to reader

This Safety Data Sheet is prepared in accordance with Annex II to Regulation (EC) No 1907/2006 (REACH). The information contained in this Safety Data Sheet is based on the present state of knowledge and current EU and national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.