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

1.1 Product identifier
Product name: PANSSARIPESU
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
Telephone number: +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]
Skin Corr. 1, H314
The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

2.2 Label elements
Hazard pictograms:

Signal word: Danger
Hazard statements: H314 - Causes severe skin burns and eye damage.
Precautionary statements:
General: P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.
Prevention: P261 - Avoid breathing mist/vapors/spray.
P280 - Wear protective gloves/clothing and eye/face protection.
P284 - In case of inadequate ventilation wear respiratory protection.
Response:
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P310 - Immediately call a POISON CENTER or physician.

Storage: Not applicable.
Disposal: Not applicable.
Hazardous ingredients: Ammonia
Supplemental label elements:
- Contains 1,2-benzisothiazol-3(2H)-one (BIT). May produce an allergic reaction.

EU Detergents Regulation:
- Less than 5%: anionic surfactants, phosphates, BENZISOTHIAZOLINONE.

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

SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>3.2 Mixtures</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product/ingredient name</td>
<td>Identifiers</td>
</tr>
<tr>
<td>(2-butoxyethoxy)ethanol</td>
<td>REACH #: 01-2119475104-44</td>
</tr>
<tr>
<td>EC: 203-961-6</td>
<td></td>
</tr>
<tr>
<td>CAS: 112-34-5</td>
<td></td>
</tr>
<tr>
<td>Index: 603-096-00-8</td>
<td>≥10 - ≤25</td>
</tr>
<tr>
<td>Eye Irrit. 2, H319</td>
<td></td>
</tr>
<tr>
<td>ammonia</td>
<td>REACH #: 01-2119488876-14</td>
</tr>
<tr>
<td>EC: 215-647-6</td>
<td></td>
</tr>
<tr>
<td>CAS: 1336-21-6</td>
<td></td>
</tr>
<tr>
<td>Index: 007-001-01-2</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Skin Corr. 1B, H314</td>
<td></td>
</tr>
<tr>
<td>STOT SE 3, H335</td>
<td></td>
</tr>
<tr>
<td>Aquatic Acute 1, H400 (M=1)</td>
<td>B</td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one (BIT)</td>
<td>EC: 220-120-9</td>
</tr>
<tr>
<td>CAS: 2634-33-5</td>
<td>&lt;0,05</td>
</tr>
<tr>
<td>Acute Tox. 4, H302</td>
<td></td>
</tr>
<tr>
<td>Skin Irrit. 2, H315</td>
<td></td>
</tr>
<tr>
<td>Eye Dam. 1, H318</td>
<td></td>
</tr>
<tr>
<td>Skin Sens. 1, H317</td>
<td></td>
</tr>
<tr>
<td>Aquatic Acute 1, H400 (M=1)</td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic 2, H411</td>
<td></td>
</tr>
<tr>
<td>See Section 16 for the full text of the H statements declared above.</td>
<td></td>
</tr>
</tbody>
</table>

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.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit 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.

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>INCI Name</th>
<th>CAS #</th>
<th>Class of constituent</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohols, C12-14, ethoxylated, sulfates, sodium salts</td>
<td></td>
<td>68891-38-3</td>
<td>anionic surfactants</td>
<td>less than 5%</td>
</tr>
<tr>
<td>polyphosphoric acids, sodium salts</td>
<td></td>
<td>68915-31-1</td>
<td>phosphates</td>
<td>less than 5%</td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td>BENZISOTHIAZOLINONE</td>
<td>2634-33-5</td>
<td>preservation agents</td>
<td>less than 5%</td>
</tr>
</tbody>
</table>
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 20 minutes. Get medical attention immediately. Continue rinsing until medical attention can be obtained.

Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. In case of chemical burns, get medical attention as soon as possible.

Ingestion: If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Remove to fresh air and keep at rest in a position comfortable for breathing. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage. See Section 11 for more detailed information on health effects and symptoms.

Contains: 1,2-benzisothiazol-3(2H)-one (BIT)
May produce an allergic reaction.

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

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. Do not breathe vapor or mist. Do not get in eyes or on skin. Put on appropriate personal protective equipment (see Section 8).

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.

6.4 Reference to other sections: See Section 1 for emergency contact information. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling: Skin contact with the product and exposure to spray mist and vapor should be avoided. Avoid inhalation of dust from sanding. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
</table>
| 2-(2-butoxyethoxy)ethanol | EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values  
TWA: 67,5 mg/m³ 8 hours.  
TWA: 10 ppm 8 hours.  
STEL: 101,2 mg/m³ 15 minutes.  
STEL: 15 ppm 15 minutes. |

Recommended monitoring procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectivenes 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. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn (see Personal protection). Provide a readily-accessible eyewash facility. Comply with the health and safety at work laws.

Individual protection measures

Eye/face protection : Wear eye/face protection (EN166).
Hand protection : Always wear approved protective gloves against chemicals. 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):
> 8 hours (breakthrough time): nitrile rubber
Not recommended: PVA gloves
Skin protection : Wear suitable protective clothing.
Respiratory protection : If ventilation is inadequate, use respirator that will protect against dust/mist. If ventilation during spray-application is inadequate, use respirators with combination filter AP, gas/dust filter (EN405:2001). Wear a half mask or full face respirator with gas and vapor filter A and dust filter P2 during sanding (EN140:1998, EN405:2001). During continuous and long-term work the use of motor-driven or air-fed respirators is recommended (EN12941:1998). 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 : 2
Melting point/freezing point : <=-70°C (2-(2-butoxyethoxy)ethanol)
Initial boiling point and boiling range : 25 to 227.6°C (2-(2-butoxyethoxy)ethanol)
Flash point : > 100 °C
Evaporation rate : 0.003 (butyl acetate = 1) (2-(2-butoxyethoxy)ethanol)
Flammability (solid, gas) : Not applicable. Product is a liquid.
Upper/lower flammability or explosive limits : Lower: 0.8% (2-(2-butoxyethoxy)ethanol) Upper: 9.4% (2-(2-butoxyethoxy)ethanol)
Vapor pressure : 0.1 kPa [room temperature] (2-(2-butoxyethoxy)ethanol)
Vapor density : 6 (2-(2-butoxyethoxy)ethanol)
Density : 0.98 g/cm³
Solubility(ies) : Miscible in water.
Partition coefficient: n-octanol/water : Not available.
Auto-ignition temperature : 210°C (2-(2-butoxyethoxy)ethanol)
Decomposition temperature : Not relevant for the hazard assessment of the product.
Viscosity : Not relevant for the hazard assessment of the product.
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: acids

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 causes irritation of respiratory system and mucous membranes of nose and throat. Prolonged contact can cause severe irritation or even burns.

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>1,2-benzisothiazol-3(2H)-one (BIT)</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1020 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Not classified.

Irritation/Corrosion

Causes severe skin burns and eye damage.

Sensitization

The product is not classified as sensitizing by skin contact, but it contains following preservatives or other biocides which may produce an allergic reaction:

1,2-benzisothiazol-3(2H)-one (BIT)

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>Ammonia</td>
<td>LC50 0,53 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one (BIT)</td>
<td>Acute EC50 0,36 mg/l</td>
<td>Algae - Skeletonema costatum</td>
<td>72 hours</td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one (BIT)</td>
<td>Acute LC50 0,74 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>alcohols, C12-14, ethoxylated, sulfates, sodium salts</td>
<td>IC50 10 mg/l</td>
<td>Algae</td>
<td>72 hours</td>
</tr>
<tr>
<td>alcohols, C12-14, ethoxylated, sulfates, sodium salts</td>
<td>LC50 7,1 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability

Biodegradability report: Not available.

12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</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>polyphosphoric acids, sodium salts</td>
<td>-</td>
<td>1,5</td>
<td>low</td>
</tr>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>1</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>): 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

Methods of disposal: Empty packaging should be recycled or disposed of in accordance with national regulations.

Special precautions: No additional information.

SECTION 14: Transport information

<table>
<thead>
<tr>
<th>Additional information</th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 UN number</td>
<td>UN1719</td>
<td>UN1719</td>
<td>UN1719</td>
</tr>
<tr>
<td>14.2 UN proper shipping name</td>
<td>CAUSTIC ALKALI LIQUID, N.O.S. (ammonia)</td>
<td>CAUSTIC ALKALI LIQUID, N.O.S. (ammonia)</td>
<td>Caustic alkali liquid, n. o.s. (ammonia)</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>
</tbody>
</table>

Hazard identification number: 80
Limited quantity: 5 L
Special provisions: 274
Tunnel code: (E)

Emergency schedules (EmS): F-A, S-B
Special provisions: 223, 274

Passenger and Cargo Aircraft
Quantity limitation: 5 L
Packaging instructions: 852

Cargo Aircraft Only
Quantity limitation: 60 L
Packaging instructions: 856

Limited Quantities - Passenger Aircraft
Quantity limitation: 1 L
Packaging instructions: Y841

Special provisions: A3, A803
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
EHI 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>
<tbody>
<tr>
<td>Skin Corr. 1, H314</td>
<td>On basis of test data</td>
</tr>
</tbody>
</table>

**Full text of abbreviated H statements:**

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.

**Full text of classifications [CLP/GHS]:**

- Acute Tox. 4, H302 ACUTE TOXICITY (oral) - Category 4
- Aquatic Acute 1, H400 AQUATIC HAZARD (ACUTE) - Category 1
- Aquatic Chronic 2, H411 AQUATIC HAZARD (LONG-TERM) - Category 2
- Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
- Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
- Skin Corr. 1, H314 SKIN CORROSION/IRRITATION - Category 1
- Skin Corr. 1B, H314 SKIN CORROSION/IRRITATION - Category 1B
- Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2
- Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1
- STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
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.