Panasonic

SAFETY DATA SHEET

| SECTION 1: Identification of | f the substance/mixture and of the company/undertaking | |
|-----------------------------------|---|--|
| 1.1. Product identifier | | |
| Product name: | WES035, Special Detergent for Shaver Cleaning & Charging System | |
| 1.2. Relevant identified uses o | f the substance or mixture and uses advised against | |
| Identified uses: | Detergent for Shaver Blades | |
| Uses advised against: | No information | |
| 1.3. Details of the supplier of t | the safety data sheet | |
| Name of supplier (impo | rter): Panasonic Marketing Europe GmbH | |
| Department in Charge | Panasonic Testing Center (PTC) | |
| Address | Winsbergring 15, 22525 Hamburg, Germany | |
| Telephone number | +49 (0)40 8549-0 | |
| e-mail address | docmaster@eu.panasonic.com | |
| 1.4. Emergency telephone nur | nber | |
| | As above (working days, 9:00 - 16:00 hrs) or next toxicological | |
| | information centre. | |

2.1. Classification of the substance or mixture Classification in accordance with EC No 1272/2008:

Not Hazardous

2.2. Label elements

In accordance with EC No 1272/2008: Pictogram

No Symbol

| Signal word | No Signal Word |
|---------------------------------|-----------------------------------|
| Hazard Statements | Not Classified under CLP criteria |
| Precautionary Statements | |
| [Prevention] | No precautionary phrases |
| [Emergency response] | No precautionary phrases |
| [Disposal] | No precautionary phrases |

SECTION 3: Composition/information on ingredients

3.1. Substances or Mixtures Mixtures

Product Name:

WES035, Special Detergent for Shaver Cleaning & Charging System

| (wt %) | limits |
|--|----------------|
| 2-Aminoethanol 141-43-5 205-483-3 1.31 Acute Tox. 4: H302 H312 H332 | STOT SE 3; |
| 2-Aminoethanol 141-43-5 205-483-3 1.31 Acute Tox. 4; H302 H312 H332 Skin Corr. 1B; H314 | H335: C≥5 % |
| CLP/GHS: | $C \ge 5.70$ |
| Alcohols secondary C11-15 | |
| ethoxylated 68131-40-8 614-295-4 2.81 Aquatic Acute 1; H400 | - |
| Aquatic Chronic 3; H402 | |
| CLP/GHS: | |
| N, N-Dioctyl-N, Flam Liq .3;H226 | |
| N-dimethylammonium 68424-95-3 270-331-5 0.56 Acute Tox. 4;H302, 3;H311 | - |
| chloride Skin Corr. 1B; H314 | |
| Eye Irrit. 2A; H319 | |
| Acute Tox.4;H302, 3;H331 | |
| Skin Sens.1;H317 | |
| 3-lodo-2-propynyl 55406-53-6 259-627-5 0.05 Eye Dam. 1; H318 | |
| butylcarbamate 55406-53-6 259-627-5 0.05 Difference | |
| Aquatic Acute 1 ; H400 | |
| Aquatic Chronic 1; H410 | |
| Ethanol 64-17-5 200-578-6 0.07 Flam Liq.2;H225 | |
| 2,2'-Oxydiethanol 111-46-6 203-872-2 4.59 CLP/GHS: | |
| Acute Tox. 4 ; H302 | - |
| Poly(oxy-1,2-ethanediyl), a-hy CLP/GHS: | |
| dro-ω-hydroxy- Ethane- 1,2-diol, ethoxylated 25322-68-3 500-038-2 9.36 STOT SE3; H335 | - |
| Fatty acids, C14-18 and C16-18-unsatd 67701-06-8 266-930-6 3.00 - | - |
| CLP/GHS: | |
| Ox Sol 3: H272 | |
| Sodium nitrite 7632-00-0 231-555-9 1.87 Acute Tox. 3; H301 | - |
| Aquatic Acute 1; H400 | |
| GHS: | |
| Dieg ling dibulge and | |
| Disodium dihydrogen ethylenediaminetetraacetate 139-33-3 205-358-3 1.40 CLP/GHS: | - |
| STOT RE2; H373 | |
| Acute Tox. 4; H332 | |
| Fragrance 0.09 - | - |
| L-lysine homopolymer 56-87-1 200-294-2 0.24 - | - |
| Silicone antifoaming agent 12.0 - | - |
| Water 7732-18-5 231-791-2 62.65 - | - |

Information on ingredients:

| SECTION 4. First and incasures | |
|--|--|
| 4.1. Description of first aid measures | 5 |
| IF INHALED | If you feel unwell, get medical advice/ attention immediately and at rest. |
| | If symptoms continue, call a doctor/physician. |
| IF ON SKIN | Rinse with plenty of water. |
| | If symptoms continue, call a doctor/physician. |
| IF IN EYES | Immediately rinse cautiously with water for 15 - 20 minutes. |
| | Remove contact lenses, if present and easy to do. Continue rinsing. |
| | If symptoms continue, call a doctor/physician. |
| IF SWALLOWED | Without inducing vomiting, immediately get medical |
| | advice/attention. If mouth has been dirtied, clean with water. |

4.2. Most important symptoms and effects, both acute and delayed

No additional information available.

SECTION 4: First aid measures

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Use water mist, dry chemical powder, fire foam or carbon dioxide depending on fire in surrounding area.

Unsuitable extinguishing media

No additional information available.

5.2. Special hazards arising from the substance or mixture

No additional information available.

5.3. Advice for firefighters

Take action from windward. Keep out except responsible personnel. Move container to a safe area if it can be done without risk.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Stay away from leakage.

For emergency responders:

Keep out except responsible personnel. Wear suitable protective clothing.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

In case of spills, beware of slippery floors and surfaces. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

6.4. Reference to other sections

Refer to "SECTION 8: Exposure controls/personal protection" and "SECTION 13: Disposal considerations" as appropriate.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures:

Install appropriate equipment and wear suitable protective apparatus described in "SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION". Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

Do not cat, drink of smoke when using this produc

Advice on general occupational hygiene:

Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures:

In the storage area, install adequate light and ventilation systems to handle materials.

Incompatible materials:

No additional information available

Conditions for safe storage:

Avoid sunlight. Store in a cool place.

Packing material:

Use a sealed container without damage or leakage.

7.3. Specific end use(s)

Cleaning agents

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acceptable concentration (exposure limit, biological exposure index)

OSHA PEL(2012) EU IOELV Eight hours (2013) EU IOELV Short-term (2013) ACGIH TLV-TWA (2013) ACGIH TLV-STEL (2013) 6mg/m³, 3ppm (2-Aminoethanol) 2.5 mg/m³, 1 ppm (2-Aminoethanol) 7.6 mg/m³, 3 ppm (2-Aminoethanol) 3 ppm (2-Aminoethanol) 6 ppm (2-Aminoethanol)

8.2. Exposure controls

Appropriate engineering controls:

Shower and eye washer should be available in the work area. Under high temperature or in case of mist generation, use ventilation.

Personal protective equipment:

| Respiratory protection | No respiratory protection is ordinarily required under normal conditions of use. Use appropriate equipment in response to the circumstances. |
|--------------------------|--|
| Hand protection | Use protective hand gloves under prolonged or repeated skin contact. |
| Eye protection | Wear safety glasses or full face shield if splashes are likely to occur. |
| Skin and body protection | Use long sleeved clothing under prolonged usage. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Appearance | White yellow viscous liquid |
|---|-------------------------------------|
| (physical state, form and colour) | |
| Odour | Fragrant odour |
| Odour threshold | Data not available |
| pH | 8-9 |
| Melting point/freezing point | Data not available |
| Initial boiling point and boiling range | Data not available |
| Flash point | Data not available |
| Evaporation rate | Data not available |
| Flammability (solid, gas) | Data not available |
| Upper/lower flammability or | Data not available |
| explosive limits | |
| Vapour pressure | Data not available |
| Vapour density | Data not available |
| Relative density | Approx. 1.0g/cm ³ (15°C) |
| Solubility (ies) | Easily soluble in water |
| Partition coefficient: n-octanol/water | Data not available |
| Auto-ignition temperature | Data not available |
| Decomposition temperature | Data not available |
| Viscosity | Data not available |
| | |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal handling condition.

10.2. Chemical stability

Stable under normal handling condition.

10.3. Possibility of hazardous reactions

No hazardous reaction expected under normal handling.

10.4. Conditions to avoid

Avoid sunlight. Store in a cool place.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

| "Not classified" |
|---|
| Toxicity wasn't observed single dose toxicity study(mouse test) : $2000mg/kg < Ld_{50}$ |
| Not classified as a skin irritation (rabbit test :OECD TG404) |
| Not classified as an eye irritation (rabbit test :OECD TG405) |
| Not demonstrate dermal sensitisation potential in the local Lymph node assay.(OECD TG429) : Stimulation index<3.0 |
| |

| "Not classified" | |
|--|--|
| | |
| More than 60%(80%) of Biodegradable | |
| (ISO 14593 CO ₂ Headspace test) | |
| | |
| No additional information available | |
| | |
| No additional information available | |
| | |
| No additional information available | |
| No additional information available | |
| | |
| No additional information available | |
| | More than 60%(80%) of Biodegradable (ISO 14593 CO ₂ Headspace test) No additional information available No additional information available No additional information available |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste in accordance with applicable local, regional and international regulations and standards.

When disposing, consult to a certificated waste trader or local offices if they deal with the waste.

Used container should be recycled after cleaning or dispose of in compliance with related laws and local regulations.

Contents should be removed completely when dispose of empty containers.

| SECTION 14: | Transport | information |
|--------------------|-----------|-------------|
|--------------------|-----------|-------------|

| 14.1. UN number | Not applicable |
|----------------------------------|----------------|
| 14.2. UN proper shipping name | Not applicable |
| 14.3. Transport hazard class(es) | Not applicable |
| 14.4. Packing group | Not applicable |
| 14.5. Environmental hazards | Not applicable |

14.6. Special precautions for user

When transporting, avoid direct sunlight. Confirm no leakage to containers. When loading, prevent containers from falling, dropping off or damaging. Take preventive measures of collapse.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and IBC code

Not applicable

SECTION 15: Regulatory information

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

The product and its ingredients are listed or in compliance at EINECS/ELINCS (EC),TSCA (USA) ,METI (JAPAN). And are not regulated by specific provisions related to protection of human health or the environment at EU level, e.g. not considered as SVHCs or POPs.

Section 16: Other information

| Update history: | | |
|--------------------|------------|-------|
| Date of issue: | 21/04/2015 | Ver.1 |
| Ingredients Updete | 31/10/2016 | Ver.2 |

References:

ACGIH, American Conference of Governmental Industrial Hygienists (2013) TLVs and BEIs.
Federal register Vol.77,No.58, March.26.2012 : Hazard Communication
OSHA Hazard Communication Standard,29 CFR 1910,1200
Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 5th revised edition, UNITED NATIONS(2013)
National Institute of Technology and Evaluation (nite), "GHS Information"
ECHA : Registered Substance
Japanese Standards Association (JSA), JIS Z 7253:2012, JIS Z 7252:2014
Ministry of Economy, Trade and Industry, Chemical Management site.
Ministry of Health, Labour and Welfare, "Label and MSDS information for GHS model"
Guidance on information requirements and chemical safety assessment Chapter R.12: Use descriptor system. Version:2, ECHA March 2010

Manufacturer information

| Name of manufacturer in Japan: | Panasonic Corporation |
|--------------------------------|--|
| Department in Charge | Appliances Company, Beauty and Living Business Division, |
| | Personal Care Products Department |
| Address | 2-3-1-2 Noji-Higashi, Kusatsu-city, Shiga 525-8555 Japan |
| Telephone number | +81-77-563-1960 |
| Fax number | +81-77-563-5936 |
| Office hours | 9:00~17:30(JST), Mon.~Fri. , Language : Japanese only. |

[Disclaimer]

This SDS has been prepared based on the best available information however, it may not be sufficient in some cases. It is user's responsibility to modify or update any contents in this SDS regarding information on hazardous properties and/or instruction for safe handling of the product when they become available. Precautionary measures in this SDS are only applicable for normal handling conditions and it is necessary to take appropriate additional measures to ensure safe handling which depend on your specific use conditions.