SAFETY DATA SHEET

Microshield® PVP Handwash

Version 7.1.1.1
Revision date 03/03/2020
Date of last issue: 03/03/2020
Date of first issue: Not available

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier: Microshield® PVP Handwash

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture: Surgical & Antimicrobial Handwash

Recommended restrictions on use: Avoid contact with eyes. For external use only.

1.3 Details of the Supplier of the Safety Data Sheet

Schulke India Private Limited
A-24/10, Mohan Co-operative Industrial Estate, Mathura Road
New Delhi – 110044
Tel. No.: +91 11 4978 6666
Fax No.: +91 11 4978 6699
www.schuelke.com/in-en/

1.4 E-mail address of person / responsible for the SDS/Contact person: customercare.india@schuelke.com

1.5 Emergency telephone number: + 91 11 4978 6666

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Not classified as hazardous according to UN GHS criteria.

2.2 Labeling

Globally Harmonized System, UN (GHS)

Pictogram

Signal Word

Warning

H303: May be harmful if swallowed
H333: May be harmful if inhaled

Hazard Statements

H315: Cause skin irritation
H319: Cause eye irritation
H335: May cause respiratory irritation
P271: Use only outdoors or in a well-ventilated area
P261: Avoid breathing mist/vapours/spray
P280: Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P304+P312: IF inhaled: Call a poison center/doctor/physician/first aider if you feel unwell.
P337+P313: If eye irritation persists: Get medical advice/attention.
P304+P340: If inhaled: Remove person to fresh air and keep comfortable for breathing
P332+P313: If skin irritation occurs: Get medical advice/attention.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P501: Dispose of contents/container in accordance with local regulations.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Chemical name</th>
<th>CAS NO.</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Povidone Iodine IP</td>
<td>25655-41-8</td>
<td>5 to 10 %</td>
</tr>
<tr>
<td>2</td>
<td>Water</td>
<td>7732-18-5</td>
<td>Q.S</td>
</tr>
</tbody>
</table>

**Inhalation:**
In case of irritation of the respiratory system or mucous membranes, seek medical attention. Move to fresh air. Seek medical attention if you feel unwell or if exposure prolonged.

**Skin contact:**
Remove contaminated clothing. Wash affected skin with soap and plenty of water. If skin irritation or dermatitis commences or persists seek medical attention.

**Eye contact:**
Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do – continue rinsing. Seek medical attention.

**Ingestion:**
In case of spontaneous vomiting be sure that vomitus can freely drain due to danger of suffocation. Rinse mouth and then drink plenty of water. Induce vomiting (only first-aid staff) if person is conscious. Seek medical attention. Check breathing and pulse. Place victim in the recovery position, cover and keep warm. Loosen tight clothing such as a collar, tie, belt or waistband. Seek medical attention.

**Advice for the doctor:**
Symptomatic treatment

**Fire extinguishing agents:**
Water spray, Foam, Carbon dioxide (CO2), Dry powder.

**Fire/explosion hazard:**
Please refer to section 9.

**Specific hazards arising from the chemical:**
At high temperature flammable gases are released (Please refer to section 9).

**Personal protection:**
Self-contained breathing apparatus.

**Special exposure hazards:**
Do not release chemically contaminated water into drains, soil or surface water. Sufficient measures must be taken to retain the water used for extinguishing. Dispose of contaminated water and soil according to local regulations.

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### Section 6: ACCIDENTAL RELEASE MEASURES

**Personal protection:**
Goggles, gloves, protective clothing, respiratory protection.
Remove ignition sources and provide sufficient ventilation.

**Environmental precautions:**
Prevent contamination of soil, drains and surface waters.

**Spillage procedure**
Take up mechanically and collect in suitable container (adequately labelled) for disposal.

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### Section 7: HANDLING AND STORAGE

**Handling**

**Occupational hygiene:**
Avoid ingestion, inhalation, skin and eye contact. Handle in accordance with good industrial hygiene practice and any legal requirements.

**Storage:**
Handling- Avoid inhalation. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.

**Fire precautions:**
Avoid ignition sources. Ensure good local exhaust ventilation.
Keep away from heat/sparks/open flames/hot surfaces – No smoking.
Ground/bond container and receiving equipment.

**Storage facilities:**
Store in a cool, dry area with adequate ventilation. Keep tightly closed.

**Segregation:**
Store locked up.

**Storage conditions:**
Store below 25°C and protect from direct sunlight.
**Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION**

Exposure limit values:

Components with occupational exposure limits:

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Name</th>
<th>TWA</th>
<th>STEL</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>25655-41-8</td>
<td>Povidone-iodine</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Occupational exposure controls:

Appropriate engineering controls:
Maintain air concentrations below occupational exposure standards.

General Personal Protection:
Goggles, gloves, protective clothing

Respiratory protection:
Breathing apparatus with filter required if occupational exposure limits may be exceeded

Hand protection:
Protective gloves

Eye protection:
Goggles

Skin and body protection:

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, Dark brown liquid</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Dark brown</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic fragrance</td>
</tr>
<tr>
<td>pH</td>
<td>4 to 6</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not tested</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not tested</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 98°C</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not tested</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not tested</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not tested</td>
</tr>
<tr>
<td>Density</td>
<td>Not tested</td>
</tr>
</tbody>
</table>
Solubility in water : Highly Soluble
Solubility in solvents : Not tested
n-Octanol/Water Partition Coefficient : Not tested
Viscosity : Not tested
Oxidizing properties : not expected on structural indication

Section 10: STABILITY AND REACTIVITY

Conditions to avoid:
Avoid extreme conditions. Keep away from heat/sparks/open flames/hot surfaces. See information on section 9.

Materials to avoid:
Oxidizing and reducing agents

Hazardous decomposition products:
None under normal storage conditions

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity
Microshield® PVP Handwash was not tested for acute toxicity, hence the classification of Povidone Iodine is considered for the classification.
Virtually non-toxic.
Oral: LD₅₀ Rat: 4640 mg/kg
GHS Classification is not possible.

Primary Irritation
Microshield® PVP Handwash is not tested for irritation, hence the classification of Povidone Iodine is considered for the classification
- Skin: H315: Causes skin irritation [Warning Skin corrosion/irritation
- Eye: H319 (12.35%): Causes serious eye irritation

Based on data the classification of Microshield® PVP Handwash for Skin irritation & Eye damage. But looking of the usage of the formulation, probability of eye damage is very low hence we are not considering that hazard, hence not included in classification.

Respiratory or Skin sensitization
- Respiratory: Not tested
GHS Classification is not possible.

CMR consideration:
Microshield® PVP Handwash was not tested for Genotoxicity.

Germ cell mutagenicity:
- Mutagenicity (in-vitro, Ames test and E. coli assay):
- Mutagenicity (in-vitro, Gene mutation assay in mouse lymphoma cells):
- Mutagenicity (in-vitro, Chromosomal aberration test):
  GHS Classification is not possible.
- Mutagenicity (in-vivo, Micronucleus assay in mouse):
  GHS Classification is not possible.

Carcinogenicity:
Microshield® PVP Handwash was not tested for Carcinogenicity
GHS Classification is not possible.

Reproductive toxicity:
Microshield® PVP Handwash was not tested for Reproductive toxicity
GHS Classification is not possible

Specific target organ toxicity single exposure:
Microshield® PVP Handwash was not tested for STOT SE.
GHS Classification is not possible.

Specific target organ toxicity repeated exposure:
Microshield® PVP Handwash was not tested for STOT RE
In absence of specific study data and as Microshield® PVP Handwash is diluted with water hence GHS classification not possible.

Aspiration hazard:
Microshield® PVP Handwash was not tested for Aspiration Hazard
GHS Classification is not possible

Additional information:

Section 12: ECOLOGICAL INFORMATION

Eco toxicity
Acute aquatic toxicity of Microshield® PVP Handwash was not tested. But the classification of Povidone Iodine is considered for the classification of the formulation

Aquatic toxicity
Assessment of aquatic toxicity:
Acutely toxic for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low Concentrations.

Toxicity to fish
LC50 (96 h) > 4.6 - 10 mg/l, Leuciscus idus (DIN 38412 Part 15, static)
The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates
EC50 (48 h) 2.79 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)
The details of the toxic effect relate to the nominal concentration.

Microorganisms/Effect on activated sludge
Toxicity to microorganisms
DIN 38412 Part 8 aerobic bacterium/EC10 (17 h): 270 mg/l
The details of the toxic effect relate to the nominal concentration

Persistence and degradability
Assessment biodegradation and elimination (H₂O)
Not readily biodegradable (by OECD criteria). Poorly biodegradable. Poorly eliminated from water.
Not readily biodegradable (by OECD criteria). Poorly biodegradable. Poorly eliminated from water.
Elimination information
< 20 % DOC reduction (3 h) (OECD Guideline 302 B) (aerobic, activated sludge, domestic, adapted)
< 10 % (28 d) (ISO 14593) (aerobic, activated sludge, domestic)
< 10 % (28 d) (ISO 14593) (aerobic, activated sludge, domestic)

Bioaccumulative potential
The product has not been tested.

Section 13: DISPOSAL CONSIDERATIONS

Product disposal:
Observe specific national regulation

Contaminated packaging:
Contaminated, empty containers must be disposed of as chemical waste management.
Dispose of contents/container in accordance with the local/regional/national/international regulations

Section 14: TRANSPORT INFORMATION

The substance is not considered as dangerous good according to transport regulations.
Land transport (ADG): Not Regulated For Transport Of Dangerous Goods
Air transport (ICAO-IATA / DGR): Not Regulated For Transport Of Dangerous Goods
Sea transport (IMDG-Code): Not Regulated For Transport Of Dangerous Goods

Section 15: REGULATORY INFORMATION

CLASSIFICATION AND LABELLING:
Compliance with following regulations:
- According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS),
- UN Recommendations on the Transport of Dangerous Goods, UNECE 2009

Section 16: OTHER INFORMATION

NFPA’s Hazard Rating Diamond:

Note:
National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**Recommended restrictions on use:**

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.

**MSDS Changes**

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