schülke

Microshield® Tincture

Version	Revision date	Date of last issue: 22/09/2021
1.1	20/10/2021	Date of First issue: 25/07/2020

Section1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier : Microshield® Tincture

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

Use of the Substance/Mixture : For Pre-Surgical and Post-Surgical Skin Antisepsis

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

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer/ Supplier :

Schulke India Private Limited
Delphi, A - Wing, Office No. 603,
Orchard Avenue, Hiranandani Business Park, Powai, Mumbai - 400 076,
State - Maharashtra, India.
Tel. No.: +91 22 6173 6600/ 6620
Fax No.: +91 22 6173 6650
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 22 6173 6600**

Section 2: HAZARDS IDENTIFICATION

2.1 Classification

Globally Harmonized System, UN (GHS)

Classification	Category	Exposure Route
Flammable liquid	3	-
Eye Irritation	2A	-

2.2 Label elements:

Globally Harmonized System, UN (GHS)

Hazard Pictogram

Signal Word **Warning**

Hazard Statements
H226: Flammable liquid and vapour.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness

Precautionary Statements
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. - No smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof [electrical/ventilating/lighting/.../] equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.

P364: And wash it before reuse.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P405: Store locked up.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P303 + P361 + P353: IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower].
P337 + P313: IF eye irritation persists: Get medical advice/attention.
P370 + P378: In case of fire: Use CO_2 to extinguish.
P403 + P235: Store in a well-ventilated place. Keep cool.
P501: Dispose of contents/container according to local regulations as

2.3 Other hazards which do not result in classification:

Take Precautionary measure against static charge

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Sr. No	Chemical name	CAS NO. EC NO.	Classification	Composition
1	*Ethanol	64-17-5, 200-578-6	Flam.Liq 2;H235	65 to 70% v/v
2	*Chlorhexidine Gluconate Solution	18472-51-0, 55-56-1	Eye Dam. 1 H318 Aquatic Acute 2 H401 Aquatic Chronic 2 H411	0.5 to 0.7% w/v
3	Purified Water	--	--	Q.S.

Note: *Comply Indian Pharmacopeia (I.P.) monograph

Section 4: FIRST-AID MEASURES

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 the 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

Section 5: FIRE-FIGHTING MEASURES

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.

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.

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 in a cool and ventilated place, away from direct heat & flame.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure limit values:

Components with occupational exposure limits:

CAS No	Name	TWA	STEL	Source
64-17-5,	Ethanol	TWA: 1000 ppm (1900 mg/m^3)	1000 ppm-	NIOSH
18472-51-0,	Chlorhexidine Gluconate Solution	-	-	-

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:

Protective clothing

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Shall be clear or slightly turbid, pink liquid with characteristic Fragrance
Form	:	Liquid
Colour	:	Pink
Odour	:	Alcoholic odor

pH	:	Not tested
Melting point	:	Not tested
Boiling point	:	Approx. 80°C
Flash point	:	25^0C (**Based on data the GHS classification for flammable liquid is category 3)**
Vapour pressure	:	Not tested
Auto-ignition temperature	:	Not tested
Decomposition temperature	:	Not tested
Density	:	0.870 to 0.890 g/ml
Solubility in water	:	Miscible
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

Reactivity

No dangerous reaction known under conditions of normal use

Chemical stability

The product is chemically stable

Possibility of hazardous reactions

Vapours may form explosive mixture with air

Conditions to avoid:

Avoid extreme conditions. Keep away from heat/sparks/open flames/hot surfaces.

Materials to avoid:

Oxidizing and reducing agents

Hazardous decomposition products:

None under normal storage conditions

Section 11: TOXICOLOGICAL INFORMATION

Ethanol IP & Chlorhexidine Gluconate Solution (CHG) are two active ingredients of Microshield® Tincture. Microshield® Tincture is not tested for any type of toxicity hence the classification of Ethanol is considered for the classification. Chlorhexidine Gluconate Solution (CHG) is considered to be safe to use as disinfectant.

Acute toxicity

Oral, mouse: LD50 = 7060 mg/kg
GHS Classification is not possible

Primary Irritation:

Microshield® Tincture is not tested for any type of toxicity hence the classification of Ethanol is considered for the classification

- Skin: tested not irritating to skin
- **Eye:** Draize test: rabbit, irritating to eyes (500 mg severe

GHS Classification for Eye irritation is category 2

Respiratory or Skin sensitization

- Respiratory: Not tested

GHS Classification is not possible.

CMR consideration:

Microshield® Tincture 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):
- Mutagenicity (in-vivo, Micronucleus assay in mouse):

GHS Classification is not possible.

Carcinogenicity:

Microshield® Tincture was not tested for Carcinogenicity

GHS Classification is not possible.

Reproductive toxicity:

Microshield® Tincture was not tested for Reproductive toxicity

GHS Classification is not possible

Specific target organ toxicity single exposure:

Microshield® Tincture was not tested for STOT SE.
GHS Classification is not possible.

Specific target organ toxicity repeated exposure:

Microshield® Tincture was not tested for STOT RE
GHS Classification is not possible.

Aspiration hazard:

Microshield® Tincture was not tested for Aspiration Hazard

GHS Classification is not possible

Additional information:

Section 12: ECOLOGICAL INFORMATION

Eco toxicity

Acute aquatic toxicity of Microshield® Tincture was not tested.

- LC50 (fish, 96 hr): The acute toxicity of ethanol to aquatic species is >100mg/l for all trophic levels. This coupled with its ready biodegradability mean that it does not meet the criteria for classification.

GHS Classification is not possible.

Additional information

Do not discharge product uncontrolled into the environment.

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 considered to be a dangerous good according to transport regulations.

UN number

IMDG	:	UN 1170
IATA	:	UN 1170

UN Proper shipping Name

IMDG	:	ETHANOL, SOLUTION
IATA	:	ETHANOL, SOLUTION

Transport Hazard class

IMDG	:	3
IATA	:	3

Packing group

IMDG	:	III
IATA	:	III

Transport Hazard class :

Packing group : **III**

Environment hazards : **None**

Special precautions for users : **None**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.
For personal protection see section 8.

Section 15: REGULATORY INFORMATION

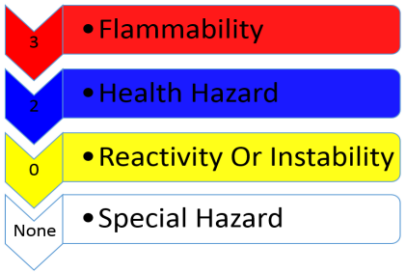
CLASSIFICATION AND LABELLING:

Compliance with the following regulations:

- According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS),
- Third Revised Edition UNITED NATIONS New York and Geneva, 2017
- UN Recommendations on the Transport of Dangerous Goods, UNECE 2009

Section 16: OTHER INFORMATION

NFPA's Hazard Rating Diamond:



Note:

The 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-----