

Page 1/8 Creation Date 12-Jan-2015 Revision Date 28-Mar-2023

Version 1

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**Product Identifier** 

Perihalan Produk: <u>BactiDrop Voges-Proskauer B TM</u>
Product Description: <u>BactiDrop Voges-Proskauer B TM</u>

**Cat No. :** R21562

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

Recommended Use Laboratory chemicals. Uses advised against No Information available

Details of the supplier of the safety data sheet

Company Thermo Scientific Microbiology Sdn Bhd

No.6, Jalan TTC 6, Taman Teknologi Cheng,

Cheng, 75250 Melaka, Malaysia

+606 334 0975 .

Supplier Oxoid Ltd.

Wade Road

Basingstoke, Hants, UK

RG24 8PW

Telephone: +44 (0) 1256 841144

E-mail address mbd-sds@thermofisher.com

**Emergency Telephone Number** 

(603) 5122 8888

CHEMTREC Malaysia 1-800-815-308 (Malay)

CHEMTREC Malaysia (Kuala Lumpur) +(60)-327884561 (Malay)

## **SECTION 2: HAZARDS IDENTIFICATION**

## Classification of the substance or mixture

| Acute oral toxicity               | Category 4 (H302)   |
|-----------------------------------|---------------------|
| Skin Corrosion/Irritation         | Category 1 A (H314) |
| Serious Eye Damage/Eye Irritation | Category 1 (H318)   |

#### **Label Elements**



Signal Word Danger

**Hazard Statements** 

OXDR21562

#### **BactiDrop Voges-Proskauer B TM**

Revision Date 28-Mar-2023

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eve damage

#### **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

P310 - Immediately call a POISON CENTER or doctor/physician

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

#### Other Hazards

This product does not contain any known or suspected endocrine disruptors

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

| Component           | CAS No    | Weight % |
|---------------------|-----------|----------|
| Potassium hydroxide | 1310-58-3 | 30       |

## **SECTION 4: FIRST AID MEASURES**

Description of first aid measures

General Advice Immediate medical attention is required

Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

Eye Contact Immediate medical attention is required. Rinse immediately with plenty of water, also under

the eyelids, for at least 15 minutes. Keep eye wide open while rinsing.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Remove and wash

contaminated clothing and gloves, including the inside, before re-use. Get medical attention

immediately if symptoms occur.

**Ingestion** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Clean

mouth with water. Get medical attention.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

#### Most important symptoms and effects, both acute and delayed

Causes burns by all exposure routes. . Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

#### Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

## **SECTION 5: FIREFIGHTING MEASURES**

#### **BactiDrop Voges-Proskauer B TM**

#### Extinguishing media

#### **Suitable Extinguishing Media**

CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

## Extinguishing media which must not be used for safety reasons

No information available.

#### Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes.

#### **Hazardous Combustion Products**

Thermal decomposition can lead to release of irritating gases and vapors.

#### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

#### **Environmental precautions**

Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

## Methods and Material for Containment and Cleaning Up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

#### Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7: HANDLING AND STORAGE**

#### Precautions for Safe Handling

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

#### Conditions for Safe Storage, Including any Incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

#### Specific End Uses

Use in laboratories.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control Parameters**

| Component Malaysia  |  | ACGIH TLV                    | OSHA PEL                               |  |
|---------------------|--|------------------------------|--|--|
| Potassium hydroxide |  | Ceiling: 2 mg/m <sup>3</sup> | (Vacated) Ceiling: 2 mg/m <sup>3</sup> |  |

OXDR21562

#### **BactiDrop Voges-Proskauer B TM**

| Component           | European Union | The United Kingdom             | Germany |
|---------------------|----------------|--------------------------------|---------|
| Potassium hydroxide |                | WEL - 2 mg/m <sup>3</sup> STEL |         |

#### **Exposure Controls**

#### **Engineering Measures**

Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

## Personal protective equipment

**Eye Protection** Goggles

Hand Protection Protective gloves
Skin and body protection Long sleeved clothing

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

When RPE is used a face piece Fit Test should be conducted

<u>Hygiene Measures</u> Handle in accordance with good industrial hygiene and safety practice

**Environmental exposure controls** Prevent product from entering drains

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

## Information on basic physical and chemical properties

Appearance Colourless
Physical State Liquid

Odor No information available
Odor Threshold No data available
pH Not applicable

Melting Point/Range
Softening Point
No data available
No data available

**Boiling Point/Range** 

Flash Point Not applicable Method - No information available

Evaporation Rate

No data available

Flammability (solid,gas) Not applicable Liquid

Not applicable

Explosion Limits No data available

OXDR21562

#### BactiDrop Voges-Proskauer B TM

(Air = 1.0)

Liquid

**Vapor Pressure** No data available **Vapor Density** No data available

Specific Gravity / Density No data available

Not applicable **Bulk Density** Soluble in water

Water Solubility

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow Potassium hydroxide 0.83

**Autoignition Temperature Decomposition Temperature** 

Viscosity **Explosive Properties Oxidizing Properties** 

No data available No data available No data available

No information available No information available

## **SECTION 10: STABILITY AND REACTIVITY**

Reactivity

None known, based on information available.

**Chemical Stability** 

Stable under normal conditions.

Possibility of Hazardous Reactions

**Hazardous Polymerization Hazardous Reactions** 

Hazardous polymerization does not occur.

None under normal processing.

**Conditions to Avoid** 

Incompatible products. Excess heat.

Incompatible Materials

None known.

**Hazardous Decomposition Products** 

Thermal decomposition can lead to release of irritating gases and vapors.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

Information on Toxicological Effects

**Acute Toxicity** 

OXDR21562

#### **BactiDrop Voges-Proskauer B TM**

#### Toxicology data for the components

| Component           | LD50 Oral                  | LD50 Dermal | LC50 Inhalation |  |
|---------------------|----------------------------|-------------|-----------------|--|
| Potassium hydroxide | LD50 = 333-384 mg/kg (Rat) |             |                 |  |

**Chronic Toxicity** 

Carcinogenicity There are no known carcinogenic chemicals in this product

SensitizationNo information availableMutagenic EffectsNo information availableReproductive EffectsNo information availableDevelopmental EffectsNo information availableTarget OrgansNo information available

**Symptoms** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Ingestion causes

severe swelling, severe damage to the delicate tissue and danger of perforation.

## **SECTION 12: ECOLOGICAL INFORMATION**

Ecotoxicity effects Contains a substance which is:. Harmful to aquatic organisms. The product contains

following substances which are hazardous for the environment.

Persistence and degradability

Persistence

Degradation in sewage

treatment plant

Soluble in water, Persistence is unlikely, based on information available.

Contains substances known to be hazardous to the environment or not degradable in waste

water treatment plants.

Bioaccumulative potential Bioaccumulation is unlikely

| Component           | log Pow | Bioconcentration factor (BCF) |
|---------------------|---------|-------------------------------|
| Potassium hydroxide | 0.83    | No data available             |

Mobility in soil The product is water soluble, and may spread in water systems. Will likely be mobile in the

environment due to its water solubility. Highly mobile in soils.

Other adverse effects No information available

## **SECTION 13: DISPOSAL CONSIDERATIONS**

Waste treatment methods

Waste from Residues/Unused

**Products** 

Waste is classified as hazardous Dispose of in accordance with the European Directives on

waste and hazardous waste Dispose of in accordance with local regulations

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

Other Information Do not flush to sewer Waste codes should be assigned by the user based on the

application for which the product was used Do not empty into drains Large amounts will

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**BactiDrop Voges-Proskauer B TM** 

skauer B TM Revision Date 28-Mar-2023

affect pH and harm aquatic organisms

## **SECTION 14: TRANSPORT INFORMATION**

IMDG/IMO

UN-No UN1814
Hazard Class 8
Packing Group II

Proper Shipping Name POTASSIUM HYDROXIDE SOLUTION

Road and Rail Transport

UN-No UN1814 Hazard Class 8 Packing Group II

Proper Shipping Name POTASSIUM HYDROXIDE SOLUTION

IATA

UN-No UN1814
Hazard Class 8
Packing Group II

Proper Shipping Name POTASSIUM HYDROXIDE SOLUTION

Special Precautions for User No special precautions required

## **SECTION 15: REGULATORY INFORMATION**

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

International Inventories X = listed

| Component           | EINECS    | TSCA | DSL | PICCS | ENCS | ISHL | IECSC | AICS | KECL     |
|---------------------|-----------|------|-----|-------|------|------|-------|------|----------|
| Potassium hydroxide | 215-181-3 | Х    | Х   | Х     | X    | Х    | Х     | Х    | KE-29139 |

|   | Component           | Seveso III Directive<br>(2012/18/EC) - Qualifying<br>Quantities for Major<br>Accident Notification | Seveso III Directive<br>(2012/18/EC) - Qualifying<br>Quantities for Safety<br>Report Requirements | Rotterdam Convention<br>(PIC) | Basel Convention<br>(Hazardous Waste) |
|---|---------------------|--|---|-------------------------------|---------------------------------------|
| I | Potassium hydroxide |  |   |                               | Annex I - Y35                         |

**National Regulations** 

Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected substance This product does not contain any known or suspected substance

## **SECTION 16: OTHER INFORMATION**

Legend

#### **BactiDrop Voges-Proskauer B TM**

Revision Date 28-Mar-2023

CAS - Chemical Abstracts Service TSCA - United States Toxic Substances Control Act Section 8(b)

Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances Substances List

**ENCS** - Japanese Existing and New Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% POW - Partition coefficient Octanol:Water

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association** 

MARPOL - International Convention for the Prevention of Pollution from

Ships

ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

#### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**Revision Date** 28-Mar-2023 **Revision Summary** Not applicable.

In accordance with local and national regulations: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet** 

OXDR21562