

# POTASSIUM PERMANGANATE 1 N (0.2 MOL/LITRE) VOLUMETRIC SOLUTION MSDS

CAS No: 7722-64-7 MSDS



## MATERIAL SAFETY DATA SHEET (MSDS)

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

#### 1.1. Product identifier

Product form : Mixture

:

Product code : B-02157

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Bio-Chem Chemicals

5455, Nicholson Road Science Market,

Ambala Cantt. 133001 Haryana (India)

+91-82952 41953

[info@biofinechemical.com](mailto:info@biofinechemical.com) - [www.biofinechemical.com](http://www.biofinechemical.com)

#### 1.4. Emergency telephone number

Emergency number : +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

N; R51/53

Full text of R-phrases: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

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### 2.2. Label elements

Labelling according to Directive 67/548/EEC or 1999/45/EC

Hazard symbols :



N -  
Dangerous  
for the  
environment

R-phrases : R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S-phrases : S35 - This material and its container must be disposed of in a safe way  
S57 - Use appropriate container to avoid environmental contamination  
S59 - Refer to manufacturer/supplier for information on recovery/recycling  
S60 - This material and its container must be disposed of as hazardous waste  
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

| Name                   | Product identifier  | %       | Classification according to Directive 67/548/EEC | Classification according to Regulation (EC) No. 1272/2008 [CLP]                                   |
|------------------------|---|---------|--|---|
| Water                  | (CAS No) 7732-18-5<br>(EC no) 231-791-2                               | 75 - 99 | Not classified                                   | Not classified  |
| Potassium permanganate | (CAS No) 7722-64-7<br>(EC no) 231-760-3<br>(EC index no) 025-002-00-9 | 1 - 5   | O; R8<br>Xn; R22<br>N; R50/53                    | Ox. Sol. 2, H272<br>Acute Tox. 4 (Oral), H302<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |
| Sodium carbonate       | (CAS No) 497-19-8<br>(EC no) 207-838-8<br>(EC index no) 011-005-00-2  | 0.1 - 1 | Not classified                                   | Not classified  |

Full text of R- and H-phrases: see section 16

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.
- First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

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

No additional information available

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).
- Unsuitable extinguishing media : Do not use a heavy water stream.

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

No additional information available

#### 5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Use personal protective equipment as required.
- Emergency procedures : Stop release.

#### 6.2. Environmental precautions

Toxic to aquatic life with long lasting effects.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Do not get in eyes, on skin, or on clothing.
- Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture.

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### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Hand protection : protective gloves  
Eye protection : Chemical goggles or safety glasses  
Skin and body protection : Wear suitable protective clothing  
Respiratory protection : Wear respiratory protection

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Colour : Dark purple solution.  
Odour : odourless.  
Odour threshold : No data available  
pH : No data available  
Relative evaporation rate (butylacetate=1) : No data available  
Melting point : No data available  
Freezing point : No data available  
Boiling point : 100 °C  
Flash point : No data available  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability (solid, gas) : No data available  
Vapour pressure : 2.3 kPa (at 20°C)  
Relative vapour density at 20 °C : 0.62  
Relative density : No data available  
Density : 1 g/cm<sup>3</sup>  
Solubility : Water: Soluble in water  
Log Pow : No data available

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|                      |                     |
|----------------------|---------------------|
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic   | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits     | : No data available |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight. Heat. Sparks.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|                           |                  |
|---------------------------|------------------|
| Acute toxicity            | : Not classified |
| Irritation                | : Not classified |
| Corrosivity               | : Not classified |
| Sensitisation             | : Not classified |
| Repeated dose toxicity    | : Not classified |
| Carcinogenicity           | : Not classified |
| Mutagenicity              | : Not classified |
| Toxicity for reproduction | : Not classified |

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water : Toxic to aquatic life with long lasting effects.

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### 12.2. Persistence and degradability

| POTASSIUM PERMANGANATE 1 N (0.2 MOL/LITRE) VOLUMETRIC SOLUTION |   |
|--|---|
| Persistence and degradability                                  | May cause long-term adverse effects in the environment. |

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to ...

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No. (ADR) : 3082  
UN-No. (IMDG) : 3082  
UN-No.(IATA) : 3082  
UN-No.(ADN) : 3082  
UN-No. (RID) : 3082

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Proper Shipping Name (IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Proper Shipping Name (ADN) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Proper Shipping Name (RID) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Transport document description (ADR) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (E)  
Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, MARINE POLLUTANT  
Transport document description (IATA) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III  
Transport document description (ADN) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III  
Transport document description (RID) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

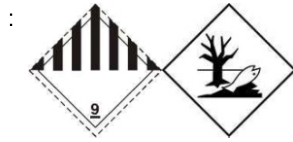
### 14.3. Transport hazard class(es)

ADR

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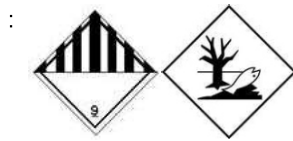
## Safety Data Sheet

Transport hazard class(es) (ADR) : 9  
Danger labels (ADR) : 9



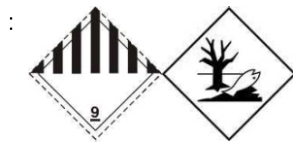
### IMDG

Transport hazard class(es) (IMDG) : 9  
Danger labels (IMDG) : 9



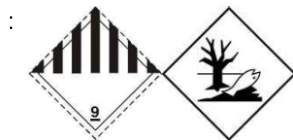
### IATA

Transport hazard class(es) (IATA) : 9  
Hazard labels (IATA) : 9



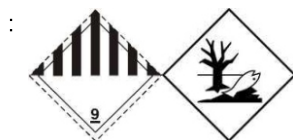
### ADN

Transport hazard class(es) (ADN) : 9  
Danger labels (ADN) : 9



### RID

Transport hazard class(es) (RID) : 9  
Danger labels (RID) : 9



### 14.4. Packing group

Packing group (ADR) : III  
Packing group (IMDG) : III  
Packing group (IATA) : III  
Packing group (ADN) : III  
Packing group (RID) : III

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### 14.5. Environmental hazards

Dangerous for the environment : Yes  
Marine pollutant : Yes  
Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : M6  
Special provision (ADR) : 274, 335, 601, 375  
Limited quantities (ADR) : 5L  
Excepted quantities (ADR) : E1  
Packing instructions (ADR) : P001, IBC03, LP01, R001  
Special packing provisions (ADR) : PP1  
Mixed packing provisions (ADR) : MP19  
Portable tank and bulk container instructions (ADR) : T4  
Portable tank and bulk container special provisions (ADR) : TP1, TP29  
Tank code (ADR) : LGBV  
Vehicle for tank carriage : AT  
Transport category (ADR) : 3  
Special provisions for carriage - Packages (ADR) : V12  
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13  
Hazard identification number (Kemler No.) : 90  
Orange plates :



Tunnel restriction code (ADR) : E  
EAC code : •3Z

#### - Transport by sea

Special provision (IMDG) : 274, 335, 969  
Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P001, LP01  
Packing provisions (IMDG) : PP1  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T4  
Tank special provisions (IMDG) : TP2, TP29  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-F  
Stowage category (IMDG) : A  
MFAG-No : 171

#### - Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y964  
PCA limited quantity max net quantity (IATA) : 30kgG



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|                                 |                   |
|---------------------------------|-------------------|
| PCA packing instructions (IATA) | : 964             |
| PCA max net quantity (IATA)     | : 450L            |
| CAO packing instructions (IATA) | : 964             |
| CAO max net quantity (IATA)     | : 450L            |
| Special provision (IATA)        | : A97, A158, A197 |
| ERG code (IATA)                 | : 9L              |

### - Inland waterway transport

|                                   |                      |
|-----------------------------------|----------------------|
| Classification code (ADN)         | : M6                 |
| Special provisions (ADN)          | : 274, 335, 375, 601 |
| Limited quantities (ADN)          | : 5 L                |
| Excepted quantities (ADN)         | : E1                 |
| Carriage permitted (ADN)          | : T                  |
| Equipment required (ADN)          | : PP                 |
| Number of blue cones/lights (ADN) | : 0                  |

### - Rail transport

|   |                           |
|---|---------------------------|
| Classification code (RID)                                     | : M6                      |
| Special provision (RID)                                       | : 274, 335, 375, 601      |
| Limited quantities (RID)                                      | : 5L                      |
| Excepted quantities (RID)                                     | : E1                      |
| Packing instructions (RID)                                    | : P001, IBC03, LP01, R001 |
| Special packing provisions (RID)                              | : PP1                     |
| Mixed packing provisions (RID)                                | : MP19                    |
| Portable tank and bulk container instructions (RID)           | : T4                      |
| Portable tank and bulk container special provisions (RID)     | : TP1, TP29               |
| Tank codes for RID tanks (RID)                                | : LGBV                    |
| Transport category (RID)                                      | : 3                       |
| Special provisions for carriage – Packages (RID)              | : W12                     |
| Special provisions for carriage – Loading and unloading (RID) | : CW13, CW31              |
| Colis express (express parcels) (RID)                         | : CE8                     |
| Hazard identification number (RID)                            | : 90                      |

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

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

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### 15.1.2. National regulations

#### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

|                     |   |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4   |
| Aquatic Acute 1     | Hazardous to the aquatic environment — Acute Hazard, Category 1                                 |
| Aquatic Chronic 1   | Hazardous to the aquatic environment — Chronic Hazard, Category 1                               |
| Ox. Sol. 2          | Oxidising Solids, Category 2  |
| H272                | May intensify fire; oxidiser  |
| H302                | Harmful if swallowed  |
| H400                | Very toxic to aquatic life  |
| H410                | Very toxic to aquatic life with long lasting effects  |
| R22                 | Harmful if swallowed  |
| R50/53              | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| R51/53              | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment      |
| R8                  | Contact with combustible material may cause fire  |
| N                   | Dangerous for the environment   |
| O                   | Oxidising   |
| Xn                  | Harmful   |

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*