1 Identification of the substances/ mixture and of the company/ undertaking

1.1 Product Identifiers

Product Number: R007
Product Name: Folin & Wu's Phosphate, Molybdate

REACH Registration Number: This product is a mixture. Reach registration number is not available for this mixture.

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

1.2.1 Relevant identified uses

Laboratory Chemicals, Analytical Purpose, Biochemical Analysis
For InVitro Diagnostic Use

1.3 Details of the supplier of the safety data sheet

Produced by: HiMedia Laboratories Private Limited
Address: 23, Vadhani Industrial Estate, LBS Marg, Ghatkopar (W), Mumbai - 400 086, India
Tel. No.: +91-22-2500 0970, +91-22-2500 1607
Fax No.: +91-22-2500 2468
Mail Id: info@himedialabs.com
Website: www.himedialabs.com

1.4 Emergency Tel. No.

Emergency Tel. No.: Please contact the regional HiMedia representation in your country

2 Hazards Identification

2.1 Classification of the substance or mixture

CLP Classification-Regulation (EC) No. 1272/2008[EU-GHS/CLP]
Skin corrosion or irritation, (Category 1A), H314

2.2 Label elements

Labeling according to Regulation (EC) No.1272/2008

Pictogram

Signal word: Danger

Hazard Statement(s)

H314 Causes severe skin burns and eye damage

Precautionary Statement(s)

P264 Wash hands thoroughly after handling. Wash skin thoroughly after handling.
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].
P310 Immediately call a POISON CENTER or doctor/physician.

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Safety data sheet(SDS)
Revision: 00000
Date of Revision: 30.10.2018

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2.3 Other Hazards
None

3 Composition/Information On Ingredients

3.2 Mixture

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molybdic acid</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=7.00 - &lt;=8.00%</td>
</tr>
<tr>
<td>CAS No. : 7782-91-4</td>
<td>EC No. : 231-970-5</td>
<td></td>
</tr>
<tr>
<td>Sodium tungstate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=1.00 - &lt;=2.00%</td>
</tr>
<tr>
<td>CAS No. : 13472-45-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10% NaOH solution</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=40.00 - &lt;=50.00%</td>
</tr>
<tr>
<td>CAS No. : 1310-73-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphoric acid</td>
<td>As Per EC Regulation 1272/2008 Skin Corr. 1B H314</td>
<td>&gt;=25.00 - &lt;=30.00%</td>
</tr>
</tbody>
</table>

Refer Section 16 for complete statement of H codes & classification.

4 First Aid Measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash with plenty of soap and water. Consult a physician.

In case of eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Rinse immediately with plenty of water for at least 15 minutes. Consult a physician.  

If swallowed  
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed  
No data available.

4.3 Indication of immediate medical attention and special treatment needed  
No data available.

5. Fire Fighting Measures  
5.1 Extinguishing media  
Suitable extinguishing media  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  

Unsuitable extinguishing media  
No data available.

5.2 Special hazards arising from the substance or mixture  
Nature of decomposition products unknown

5.3 Precautions for fire-fighters  
Wear self contained breathing apparatus for fire fighting if necessary

5.4 Further information  
No data available.

6. Accidental Release Measures  
6.1 Personal precautions, protective equipment and emergency procedures  
Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions  
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up  
Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections  
For disposal see Section 13.

7. Handling and Storage  
7.1 Precautions for safe handling  
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities  
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.  

Recommended Storage Temperature: On receipt store between 10-30°C

7.3 Specific end uses  
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.
8 Exposure Controls/Personal Protection

8.1 Control parameters
Components with workplace control parameters

8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products.

**Personal protective equipment**

**Hygiene measure**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product.

**Eye/face protection**
Tightly fitting safety goggles; Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Body protection**
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Environment exposure controls**
Do not empty into drains.

---

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colourless clear solution</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>0.40 - 1.40</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (Solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Explosive properties: No data available
Oxidizing properties: No data available
Vapour density: No data available
Thermal decomposition: No data available

9.2 Other safety information
No data available

10 Stability and Reactivity
10.1 Reactivity
No data available
10.2 Chemical stability
No data available
10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid
No data available
10.5 Incompatible materials
No data available
10.6 Hazardous decomposition products
Refer Section 5.2

11 Toxicological Information
11.1 Information on toxicological effects

Acute toxicity
No data available
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
No data available
Respiratory or skin sensitisation
No data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Specific target organ toxicity - single exposure
No data available
Specific target organ toxicity - repeated exposure
No data available
Potential Health Effects

Inhalation
REFER SECTION II
Skin
REFER SECTION II
11.2 Components

**Molybdic acid**

*Acute oral toxicity*
Rat LD50: 2,689 mg/kg (As Per OECD Test Guideline 401)

*Acute inhalation toxicity*
Rat LC50: > 2.08 mg/L air(As per OECD Guideline 403)

*Acute dermal toxicity*
Rat LD50: > 2,000 mg/kg (As per OECD Guideline 402)

*Skin irritation*
Non Irritant (ECHA)

*Eye irritation*
Not predicted as causing serious eye damage.(ECHA)

*Sensitisation*
Guinea Pig Maximisation Test (GPMT)
Result :Negative (As per OECD Guideline 406)

*Ames test*
Bacillus subtilis H17 and M45
Result: Positive (ECHA)

*Genetic toxicity*(in-vivo)*
Dominant lethal assay
Mouse Result: Positive (ECHA)

*Toxicity to Reproduction*
No data available

*Teratogenicity*
No data available

**Sodium tungstate**

*Acute oral toxicity*
Rat LD50: 1,190 mg/kg

*Acute inhalation toxicity*
Rat LC50: > 5.01 mg/l; 4 h

*Acute dermal toxicity*
No data available

*Skin irritation*
Rabbit Result: Non Irritant

*Eye irritation*
Rabbit Result: Slight irritation

*Sensitisation*
No data available

Ames test
No data available

Mutagenicity (mammal cell test)
No data available

Carcinogenicity
No data available

Toxicity to Reproduction
No data available

Teratogenicity
No data available

Additional information:
RTECS: YO7900000

**Sodium hydroxide**

*Acute toxicity*

Ingestion
Rabbit Oral; LD50: 500 mg/kg (As per OECD Test Guideline 401)
Other routes
Mouse Intraperitoneal; LD50 : 40 mg/kg (ECHA)

*Eye Damage/Irritation*
No data available

*Skin Corrosion/Irritation*
Considered to be an irritant(ECHA)

*Sensitization*
Not considered to be a sensitizer(ECHA)

*Germ cell mutagenicity*

*Genotoxicity in vitro*

*Mutagenicity (mammal cell test): micronucleus.*
Result: negative
Ames test
Result: negative(IUCLID)

*Repeated Dose Toxicity*
No data available

*Chronic Toxicity and Carcinogenicity*
No data available

*Reproductive Toxicity*
No data available

*Mutagenicity*
There is insufficient information available to conclude that sodium hydroxide is mutagenic (ECHA)

**Additional Information**
RTECS: WB4900000

**Phosphoric acid**
Acute oral toxicity
Rat LD50: 1,500 mg/kg

Acute inhalation toxicity
No data available

Acute dermal toxicity
Rabbit LD50: > 1 260 mg/kg (ECHA)

Skin irritation/Corrosion
Rabbit Result: Corrosive

Eye irritation
Rabbit Result: Non irritant (As per OECD Guideline 405)

Sensitisation
No data available

Genetic toxicity (in-vitro)
Bacterial reverse mutation assay
Result: Negative (As per OECD Guideline 471)

Mutagenicity (mammal cell test)
No data available

Carcinogenicity
No data available

Toxicity to Reproduction
No data available

Teratogenicity
No data available

Additional information:
RTECS: No data available

12 Ecological Information
12.1 Toxicity
No data available

Components:
Molybdic acid

Toxicity to fish
Pimephales promelas (Semi-static test) LC50: 609.1 mg/L; 96h (As per OECD Guideline 203)
Oncorhynchus mykiss (Rainbow trout) Flow through test LC50: 605 mg/L; 84d (As per OECD Guideline 210)

Toxicity to aquatic invertebrates
Girardia dorotocephala (Semi-static test) LC50: 1 226 mg/L; 96h

Toxicity to aquatic algae and cyanobacteria
Pseudokirchneriella subcapitata EC50: 295mg/L; 72h (As per OECD Guideline 201)

Components:
Sodium tungstate

Toxicity to daphnia and other aquatic invertebrates
Daphnia magna (Water flea) EC50: 89.4 mg/l; 48 h

Components:
Sodium hydroxide
Toxicity to Fish
Poecilia reticulata Static test: LC 50: 145 mg/l; 24 h
(As per OECD Test Guideline 203, ECHA)

Toxicity to Aquatic invertebrates
Saltwater shrimp LC 50: 30-100 mg/l; 48 h
(As per OECD Test Guideline 203, ECHA)

Toxicity to microorganisms
Tetrahymena thermophila EC10: 161 mg/l; 2 min (ECHA)

Components:
Phosphoric acid

Toxicity to microorganisms
Protozoa IC50: 240 mg/L (ECHA)

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 PBT and vPvB assessment
This preparation contains no substance considered to be persistent, bioaccumulating or toxic (PBT) or a very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
No data available

13 Disposal Considerations
13.1 Waste treatments methods
Product
Offer surplus and non-recyclable solutions to a licenced disposal company. Contact a licenced professional waste disposal service to dispose off this material.

13.2 Contaminated packaging
Dispose of as unused product.

14 Transport Information
14.1 UN-No
ADNR : ADR : IATA_C : IATA_P : IMDG : RID :

14.2 UN proper shipping name
ADNR : Not dangerous goods
ADR : Not dangerous goods
IATA_C : Not dangerous goods
IATA_P : Not dangerous goods
IMDG : Not dangerous goods
RID : Not dangerous goods

14.3 Transport hazard class(es)
ADNR : - ADR : - IATA_C : - IATA_P : - IMDG : - RID : -
14.4 Packaging group
ADNR : ADR : IATA_C : IATA_P : IMDG : RID :

14.5 Environmental hazards
ADNR : NO ADR : NO IMDG : Marine pollutant: NO IATA_C : NO IATA_P : NO RID : NO

14.6 Special precautions for use
No data available

15 Regulatory Information
This safety datasheet complies with the requirements of Regulation(EC) No. 1907/2006.

15.1 Safety health and environment regulations/legislation specific for the substance or mixture
No data available

15.2 Chemical Safety Assessment
For this product a chemical safety assessment was not carried out.

16 Other information
Text of H codes and classification mentioned in section 3

H290  May be corrosive to metals
H302  Harmful if swallowed
H314  Causes severe skin burns and eye damage
H315  Causes skin irritation
H319  Causes serious eye irritation
H335  May cause respiratory irritation
H373  May cause damage to organs through prolonged or repeated exposure
Skin Corr. 1B  Skin corrosion or irritation, Category 1B

Further Information

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