1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation
21060-69 PhosVer3 Phosphate Reagent

Use of the substance/preparation
Water analysis

Company/undertaking identification
Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach-lange.de
Internet: www.hach-lange.com

Responsible Department: HACH LANGE Ltd.
Pacific Way
Salford Manchester M50 1DL - United Kingdom
Tel. +44 (0) 161 872 1487
e-Mail: info@hach-lange.co.uk

HACH LANGE Ltd.
Unit 1, Chestnut Road Western Industrial Estate
Dublin 12 - Ireland
Tel. +353 (0)1 4602522
e-Mail: info@hach-lange.ie

2. Hazards identification

Classification
Indications of danger: Irritant
R-phrases:
Risk of serious damage to eyes.

3. Composition/information on ingredients

Chemical characterization (Mixture)

Hazardous components

<table>
<thead>
<tr>
<th>EC-No.</th>
<th>CAS-No.</th>
<th>Chemical name</th>
<th>Quantity</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>232-216-8</td>
<td>7790-62-7</td>
<td>Potassium disulfate</td>
<td>75-85 %</td>
<td>Xi R41</td>
</tr>
<tr>
<td>200-066-2</td>
<td>50-81-7</td>
<td>Ascorbic acid</td>
<td>15-25 %</td>
<td></td>
</tr>
<tr>
<td>231-551-7</td>
<td>10102-40-6</td>
<td>Sodium molybdate</td>
<td>1-10 %</td>
<td></td>
</tr>
</tbody>
</table>

Full text of each relevant R phrase can be found in heading 16.

4. First aid measures

General information
Take off contaminated clothing and shoes immediately.
Show this safety data sheet to the doctor in attendance.
After inhalation
Move to fresh air. Consult a physician after significant exposure.

After contact with skin
Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

After contact with eyes
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After ingestion
Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician immediately. Show this safety data sheet to the doctor in attendance.

Advice to doctor
Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases
The following may develop in event of fire: sulfur oxides., Carbon monoxide, carbon dioxide (CO2), sodium oxides

Special protective equipment for fire-fighters
In the event of fire, wear self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Additional information
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. Accidental release measures

Personal precautions
Use personal protective equipment.

Environmental precautions
Do not flush into surface water or sanitary sewer system.

Methods for cleaning up/taking up
Soak up with inert absorbent material.

7. Handling and storage

Handling
Advice on safe handling
Use only in well-ventilated areas. Do not breathe vapours/dust. Avoid contact with skin and eyes.

Storage
Requirements for storage rooms and vessels
Keep at temperatures between 10 and 25°C.

8. Exposure controls/personal protection

Exposure limit values
Exposure controls

Occupational exposure controls
The type of protective equipment must be selected according to the concentration and amount of the
dangerous substance at the specific workplace.

Protective and hygiene measures
Wash hands before breaks and at the end of workday.

Respiratory protection
Provide adequate ventilation.

Hand protection
Use barrier skin cream.
Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In
full contact: Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In
splash contact: Glove material: nitrile rubber, Layer thickness 0.20 mm, Breakthrough time: > 30 min

Eye protection
Safety glasses with side-shields

Skin protection
Avoid contact with skin, eyes and clothing.

9. Physical and chemical properties

General information
Physical state: solid
Colour: white
Odour: odourless

Important health, safety and environmental information

Test method
pH-Value (at 20 °C): 1,5 (5 % solution)

Changes in the physical state
Melting point: 105 °C
Flash point: not applicable

Flammability
Solid: not applicable
Gas: not applicable

Explosive properties
not applicable

Water solubility:
(at 20 °C) soluble

Solubility in other solvents: acids

10. Stability and reactivity

Conditions to avoid
Extremes of temperature and direct sunlight.

Materials to avoid
oxidizing agents
bases
Hazardous decomposition products
  carbon dioxide (CO2), Carbon monoxide, Sulphur oxides

Additional information
  Stable under recommended storage conditions.

11. Toxicological information

Acute toxicity
  No data is available on the product itself.

Specific effects in experiment on an animal
  No data is available on the product itself.
  Potassium disulfate LD50/oral/rat = 2340 mg/kg
  Sodium molybdate LD50/oral/rat = 4000 mg/kg
  Ascorbic acid LD50/oral/rat = 11900 mg/kg

12. Ecological information

Ecotoxicity
  No data is available on the product itself.

13. Disposal considerations

Advice on disposal
  In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products
  160506  WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
  Classified as hazardous waste.

Waste disposal number of used product
  160506  WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
  Classified as hazardous waste.

Waste disposal number of contaminated packaging
  160506  WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
  Classified as hazardous waste.

14. Transport information

Land transport (ADR/RID)
  Other applicable information (land transport)
    Not subject to transport regulations.

Inland waterways transport
  Other applicable information (inland waterways transport)
    Not tested

Marine transport
15. Regulatory information

Labelling

Danger symbols:  
Xi - Irritant

Hazardous component(s) to be indicated on label

Potassium disulfate

R phrases

41  Risk of serious damage to eyes.

S phrases

26  In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

37/39  Wear suitable gloves and eye/face protection.

Additional advice on labelling

Classification according to European directive on classification of hazardous preparations 1999/45/EC.

National regulatory information

Water contaminating class (D):  2 - water contaminating

16. Other information

Full text of R-phrases referred to under sections 2 and 3

41  Risk of serious damage to eyes.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)