SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Phosphate 2 Reagent
Catalog Number: 106199

Hach Company
P.O. Box 389
Loveland, CO USA 80539
(970) 669-3050

Emergency Telephone Numbers:
(Medical and Transportation)
(303) 673-5716 24 Hour Service
(515) 232-2533 8am - 4pm CST

MSDS Number: M00006
Chemical Name: Not applicable
CAS Number: Not applicable
Additional CAS No. (for hydrated forms): Not applicable
Chemical Formula: Not applicable
Chemical Family: Not applicable
Intended Use: Laboratory Reagent Phosphate determination

2. HAZARDS IDENTIFICATION

This mixture is not classified as hazardous per GHS (UN publication ST/SQ/AC.10/36/Add.3)

GHS Classification:
Hazard categories: Not applicable
GHS Label Elements:
Not applicable

Hazard statements: Not applicable
Precautionary statements: Not applicable

HMIS:
Health: 0
Flammability: 0
Reactivity: 0
Protective Equipment: X - See protective equipment. Section 8.

NFPA:
Health: 0
Flammability: 0
Reactivity: 0
Symbol: Not applicable
WHMIS Hazard Classification: Not applicable
WHMIS Symbols: Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components according to GHS: No

Potassium Sulfate

CAS Number: 7778-80-5
Chemical Formula: K₂SO₄
GHS Classification: Non-Haz
Percent Range (Trade Secret): >95.0
Percent Range Units: weight / weight
PEL: Not established
TLV: Not established

WHMIS Symbols: Not applicable

Stannous Tartrate

CAS Number: 815-85-0
Chemical Formula: C₆H₆O₆Sn
GHS Classification: Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT Single 3, H335
Percent Range (Trade Secret): < 5.0
Percent Range Units: weight / weight
PEL: 0.1 mg/m³ as Sn
TLV: 0.1 mg/m³ as Sn

WHMIS Symbols: Not applicable

4. FIRST AID MEASURES

General Information: In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a doctor.
Advice to doctor: Treat symptomatically.
Eye Contact: Immediately flush eyes with water for 15 minutes. Call physician if irritation develops.
Skin Contact (First Aid): Wash skin with plenty of water. Call physician if irritation develops.
Inhalation: Remove to fresh air.
Ingestion (First Aid): Give large quantities of water. If you feel unwell, contact a physician.

5. FIRE FIGHTING MEASURES

Flammable Properties: Material is not classified as flammable according to GHS criteria. Material will not burn. During a fire, corrosive and toxic gases may be generated by thermal decomposition.
Fire Fighting Instruction: As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.
Extinguishing Media: Use media appropriate to surrounding fire conditions
Extinguishing Media NOT To Be Used: Not applicable
Fire / Explosion Hazards: This product will not burn or explode. May react violently with: strong acids strong bases
Hazardous Combustion Products: This material will not burn.

6. ACCIDENTAL RELEASE MEASURES

Spill Response Notice:
Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(1)(i)) and per your company’s emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.
Containment Technique: Stop spilled material from being released to the environment. Absorb spilled liquid with non-reactive sorbent material. Releases of this material may contaminate the environment.
Clean-up Technique: Scoop up spilled material into a large beaker and dissolve with water. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Decontaminate the area of the spill with a soap solution. If permitted by regulation. Flush reacted material to the drain with a large excess of water. Otherwise. Dispose of in accordance with local, state and federal regulations or laws.
Evacuation Procedure: Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.
DOT Emergency Response Guide Number: Not applicable

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin. Wash thoroughly after handling. Use with adequate ventilation. Do not breathe dust. Maintain general industrial hygiene practices when using this product.
Storage: Keep container tightly closed when not in use. Store in a cool, dry, well-ventilated place. Protect from: moisture, heat, extreme temperatures
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

*Engineering Controls:* Maintain general industrial hygiene practices when using this product.

*Personal Protective Equipment:*
- **Eye Protection:** safety glasses with top and side shields
- **Skin Protection:** nitrile gloves In the EU, the selected gloves must satisfy the specifications of EU Directive 89/686/EEC and standard EN 374 derived from it.
- **Inhalation Protection:** adequate ventilation

*Precautionary Measures:*
- Avoid contact with: eyes skin
- Wash thoroughly after handling.
- Use with adequate ventilation.
- Do not breathe dust
- Protect from: heat moisture

*TLV:* 0.1 mg/m³ as Sn

*PEL:* 0.1 mg/m³ as Sn

*For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.*

9. PHYSICAL AND CHEMICAL PROPERTIES

*Appearance:* White powder

*Physical State:* Solid

*Molecular Weight:* Not applicable

*Odor:* Sweet

*Odor Threshold:* Not determined

*pH:* 5% solution = 3.8

*Metal Corrosivity:*
- **Corrosivity Classification:** Not classified as corrosive to metals according to GHS criteria.
- **Steel:** Not determined
- **Aluminum:** Not determined

*Specific Gravity/ Relative Density (water = 1; air =1):* 2.58

*Viscosity:* Not applicable

*Solubility:*
- **Water:** Soluble
- **Acid:** Soluble
- **Other:** Soluble in glycerol. Insoluble in alcohol.

*Partition Coefficient (n-octanol / water):* Not determined

*Coefficient of Water / Oil:* Not determined

*Melting Point:* > 400 °C (> 752 °F)

*Decomposition Temperature:* Not determined

*Boiling Point:* Not determined

*Vapor Pressure:* Not applicable

*Vapor Density (air = 1):* Not applicable

*Evaporation Rate (water = 1):* Not applicable

*Volatile Organic Compounds Content:* Not applicable

*Flammable Properties:* Material is not classified as flammable according to GHS criteria. Material will no burn. During a fire, corrosive and toxic gases may be generated by thermal decomposition.

*Flash Point:* Not applicable

*Method:* Not applicable

*Flammability Limits:*
- **Lower Explosion Limits:** Not applicable
- **Upper Explosion Limits:** Not applicable

*Autoignition Temperature:* Not applicable

*Explosive Properties:* Not classified according to GHS criteria.

*Oxidizing Properties:* Not classified according to GHS criteria.

*Reactivity Properties:*
- Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

*Gas under Pressure:* Not classified according to GHS criteria.
10. STABILITY AND REACTIVITY

Chemical Stability: Stable when stored under proper conditions.
Mechanical Impact: None reported
Static Discharge: None reported
Reactivity / Incompatibility: Incompatible with: aluminum, Magnesium
Hazardous Decomposition: Heating to decomposition releases toxic and/or corrosive fumes of: sulfur oxides, carbon dioxide, carbon monoxide, potassium oxide
Conditions to Avoid: Heat, Excess moisture

11. TOXICOLOGICAL INFORMATION

Toxicokinetics, Metabolism and Distribution: No information available for mixture.
Toxically Synergistic Products: None reported
Acute Toxicity: Acute Toxicity Estimate (ATE) - Calculated from Ingredient Toxicity Data. Route Data Given Below. Based on classification principles, the classification criteria are not met.
Oral Rat LD50 = 6701 mg/kg
Specific Target Organ Toxicity - Single Exposure (STOT-SE): Based on classification principles, the classification criteria are not met.
Specific Target Organ Toxicity - Repetent Exposure (STOT-RE): Based on classification principles, the classification criteria are not met.
Skin Corrosion/Irritation: Based on classification principles, the classification criteria are not met.
Eye Damage: Based on classification principles, the classification criteria are not met.
Sensitization: Based on classification principles, the classification criteria are not met.
CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction): Based on classification principles, the classification criteria are not met.
This product does NOT contain any IARC listed chemicals.
This product does NOT contain any NTP listed chemicals.
This product does NOT contain any OSHA listed carcinogens.
Symptoms/Effects:
Ingestion: Very large doses may cause: abdominal pain, weakness, gastrointestinal tract irritation, nausea, vomiting, diarrhea, convulsions, disturb the heart's rhythm
Inhalation: May cause: coughing, sneezing
Skin Absorption: None Reported
Chronic Effects: None reported
Medical Conditions Aggravated: Pre-existing: Eye conditions, Skin conditions, Respiratory conditions

12. ECOLOGICAL INFORMATION

Product Ecological Information: --
No ecological data available for this product. Based on classification principles, not classified as hazardous to the environment. No bioaccumulation potential. Mobility in soil: Highly mobile
Ingredient Ecological Information: --
Ecological data for ingredients is not indicative of likely ecological harm. CEPA categorization for each and every ingredient: Persistent. Not bioaccumulative and not inherently toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: Not applicable
Special Instructions (Disposal): Dilute material with excess water making a weaker than 5% solution. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. If permitted by regulation. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system. Otherwise, check with local municipal and state authorities and waste contractors for pertinent local information regarding the proper disposal of chemicals.
Empty Containers: Working in a well-ventilated area. Rinse three times with an appropriate solvent. Collect rinsate and dispose of according to local, state or federal regulations. In the US, rinse empty containers is classified as hazardous waste and should be disposed of at an E.P.A. approved facility. Rinsate from empty containers may contain sufficient product to require disposal as hazardous waste. Dispose of empty container as normal trash.
NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information. In Europe: Chemical
14. TRANSPORT INFORMATION

D.O.T.:
D.O.T. Proper Shipping Name: Not Currently Regulated

- Hazard Class: NA
- Subsidiary Risk: NA
- ID Number: NA
- Packing Group: NA

T.D.G.:
- Proper Shipping Name: Not Currently Regulated

- Hazard Class: NA
- Subsidiary Risk: NA
- UN Number/PIN: NA
- Packing Group: NA

I.C.A.O.:
I.C.A.O. Proper Shipping Name: Not Currently Regulated

- Hazard Class: NA
- Subsidiary Risk: NA
- ID Number: NA
- Packing Group: NA

I.M.O.:
- Proper Shipping Name: Not Currently Regulated

- Hazard Class: NA
- Subsidiary Risk: NA
- ID Number: NA
- Packing Group: NA

Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

U.S. Federal Regulations:
O.S.H.A.: This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

E.P.A.:
S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): Immediate (Acute) Health Hazard
S.A.R.A. Title III Section 313 (40 CFR 372): This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.

- 302 (EHS) TPQ (40 CFR 355): Not applicable
- 304 CERCLA RQ (40 CFR 302.4): Not applicable
- 304 EHS RQ (40 CFR 355): Not applicable
Clean Water Act (40 CFR 116.4): Not applicable
RCRA: Contains no RCRA regulated substances.

State Regulations:
California Prop. 65: No Prop. 65 listed chemicals are present in this product.
Identification of Prop. 65 Ingredient(s): None
California Perchlorate Rule CCR Title 22 Chap 33: Not applicable
Trade Secret Registry: Not applicable

National Inventories:
U.S. Inventory Status: All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).
CAS Number: Not applicable
Canadian Inventory Status: All ingredients of this product are DSL/NDSL Listed.
EEC Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS.
Australian Inventory (AICS) Status: Some ingredients are not listed.
New Zealand Inventory (NZIoC) Status: Some ingredients are not listed or exempt.
Korean Inventory (KECI) Status: All components of this product are either listed, listed as the anhydrous compound or exempt.
Japan (ENCS) Inventory Status: All components either listed or exempt.
China (PRC) Inventory (MEP) Status: All components either listed or exempt.

16. OTHER INFORMATION


Complete Text of H phrases referred to in Section 3: H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

Revision Summary: Substantially Revised MSDS Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).

Date of MSDS Preparation:
Day: 27
Month: April
Year: 2014

MSDS Prepared: MSDS prepared by Product Compliance Department extension 3350

CCOHS Evaluation Note: It is offered under exemption from WHMIS labeling as specified in the Controlled Products Regulation (CPR) Section 17. It is offered under the interim policy that was established by Health Canada permitting use of GHS-formatted safety data sheets in Canada prior to revision of CPR to GHS. This product has been classified and labeled in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3). This SDS has been prepared in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3).

Legend:
NA - Not Applicable
ND - Not Determined
NV - Not Available
w/w - weight/weight
w/v - weight/volume
v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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