Material Safety Data Sheet
VWR International

Product Name: Sodium Phosphate, Monobasic, Anhydrous, USP (Monosodium Phosphate, Anhydrous)	**Issue Date:** 2009.09.17
	Print Date: 04 Mar 2010

VWR International encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. Product and Company Identification

Product Name
Sodium Phosphate, Monobasic, Anhydrous, USP (Monosodium Phosphate, Anhydrous)

COMPANY IDENTIFICATION
ANGUS Chemical Company
A Subsidiary of The Dow Chemical Company
1500 East Lake Cook Road
Buffalo Grove, IL 60089-0000
USA

For MSDS updates and Product Information: 800-258-2436

Prepared By: Prepared for use in Canada by EH&S, Product Regulatory Management Department.
450-652-1029
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Customer Information Number: 800-258-2436

EMERGENCY TELEPHONE NUMBER
24-Hour Emergency Contact: 989-636-4400
Local Emergency Contact: 989-636-4400

2. Hazards Identification

Emergency Overview
Color: White
Physical State: Solid.
Odor: Odorless
Hazards of product:

CAUTION! May cause eye irritation. May cause skin irritation. Isolate area.

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Potential Health Effects

Eye Contact: May cause slight eye irritation. Dust may irritate eyes.
Skin Contact: Prolonged contact may cause moderate skin irritation with local redness.
Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts.
Inhalation: Dust may cause irritation to upper respiratory tract (nose and throat).
Ingestion: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. May cause nausea and vomiting. May cause abdominal discomfort or diarrhea.
Effects of Repeated Exposure: In humans, effects have been reported on the following organs: Kidney.

3. Composition/information on ingredients

Component	CAS #	Amount W/W
Phosphoric acid, monosodium salt	7558-80-7	100.0 %

Amounts are presented as percentages by weight.

4. First-aid measures

Eye Contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.
Skin Contact: Wash skin with plenty of water.
Inhalation: Move person to fresh air; if effects occur, consult a physician.
Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.
Notes to Physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
Emergency Personnel Protection: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

5. Fire Fighting Measures

Extinguishing Media: This material does not burn. If exposed to fire from another source, use suitable extinguishing agent for that fire.
Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. This material does not burn. Fight fire for other material that is burning.
Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.
Unusual Fire and Explosion Hazards: None known.
Hazardous Combustion Products: Fire conditions may cause this product to decompose. Refer to section 10 - Thermal Decomposition.

See Section 9 for related Physical Properties

6. Accidental Release Measures

Steps to be Taken if Material is Released or Spilled: Contain spilled material if possible. Use care to minimize generation of airborne dust. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.
Personal Precautions: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.
Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

7. Handling and Storage

Handling
General Handling: Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Storage
Store in a cool, dry place. Keep container tightly closed. Protect from atmospheric moisture.

8. Exposure Controls / Personal Protection

Exposure Limits

Consult local authorities for recommended exposure limits.
None established

Personal Protection
Eye/Face Protection: Use safety glasses (with side shields). If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.
Skin Protection: Wear clean, body-covering clothing.

> **Hand protection:** Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In dusty or misty atmospheres, use an approved particulate respirator. The following should be effective types of air-purifying respirators: Particulate filter.
Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Controls
Ventilation: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

9. Physical and Chemical Properties

Physical State	Solid.
Color	White
Odor	Odorless
Odor Threshold	Odorless
Flash Point - Closed Cup	No test data available
Flammability (solid, gas)	No
Flammable Limits In Air	**Lower**: No test data available **Upper**: No test data available
Autoignition Temperature	No test data available
Vapor Pressure	No test data available
Boiling Point (760 mmHg)	No test data available.
Vapor Density (air = 1)	No test data available
Specific Gravity (H2O = 1)	No test data available
Freezing Point	No test data available
Melting Point	204 °C *Supplier* Decomposes
Solubility in water (by weight)	*Supplier* soluble in water
pH	4.1 - 4.5 *Supplier* 1% aqueous solution.
Molecular Weight	119.98 g/mol *Supplier*
Molecular Formula	Na-H2-P-O4
Decomposition Temperature	No test data available
Evaporation Rate (Butyl Acetate = 1)	Not applicable to solids
Kinematic Viscosity	Not applicable

10. Stability and Reactivity

Stability/Instability
Thermally stable at typical use temperatures. Hygroscopic.
Conditions to Avoid: Exposure to elevated temperatures can cause product to decompose. Avoid moisture.

Incompatible Materials: Strong alkalies.

Hazardous Polymerization
Will not occur.

Thermal Decomposition
Decomposition products can include and are not limited to: Phosphorus oxides. Sodium oxides.

11. Toxicological Information

Acute Toxicity
Ingestion
LD50, Rat > 2,000 mg/kg
Skin Absorption
LD50, Rabbit > 7,940 mg/kg
Repeated Dose Toxicity
In humans, effects have been reported on the following organs: Kidney.
Genetic Toxicology
In vitro genetic toxicity studies were negative.

12. Ecological Information

ENVIRONMENTAL FATE

Movement & Partitioning
Partitioning from water to n-octanol is not applicable.

Persistence and Degradability
Biodegradation is not applicable.

ECOTOXICITY
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

Fish Acute & Prolonged Toxicity
LC50, golden orfe (Leuciscus idus), static, 48 h: > 2,400 mg/l

13. Disposal Considerations

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. VWR INTERNATIONAL HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Landfill. Incinerator or other thermal destruction device.

14. Transport Information

TDG Small container
NOT REGULATED

TDG Large container
NOT REGULATED

IMDG
NOT REGULATED

ICAO/IATA
NOT REGULATED

15. Regulatory Information

US. Toxic Substances Control Act
All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30
CEPA - Domestic Substances List (DSL)

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

European Inventory of Existing Commercial Chemical Substances (EINECS)

The components of this product are on the EINECS inventory or are exempt from inventory requirements.

Hazardous Products Act Information: CPR Compliance

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Hazardous Products Act Information: WHMIS Classification

The WHMIS classification for this product is as follows. Also, refer elsewhere in the MSDS for specific warnings and safe handling information; and refer to your employer's workplace education program.

D2B	Eye or Skin Irritant

Hazardous Products Act Information: Hazardous Ingredients

This product contains the following ingredients which are Controlled Products and/or are on the Ingredient Disclosure List (Canadian HPA Section 13 and 14).

Component	CAS #	Amount W/W
Phosphoric acid, monosodium salt	7558-80-7	100.0%

16. Other Information

Hazard Rating System

NFPA	Health	Fire	Reactivity
	1	0	0

Recommended Uses and Restrictions

Life sciences research chemical. VWR International recommends that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact the Customer Information Group (see Section 1 of this data sheet).

Revision

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Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

N/A	Not available
W/W	Weight/Weight
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
DOW IHG	Dow Industrial Hygiene Guideline
WEEL	Workplace Environmental Exposure Level
HAZ_DES	Hazard Designation
VOL/VOL	Volume/Volume

VWR International urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product

as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.