

Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Catalog Numbers: AD1596, AD1596-DB, AD1598
Product Identity: OP Titrant, Organophosphonate Solution No. 2

Chemical Family: Not Applicable

Synonyms: Not Applicable

Recommended Use: Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291
Emergency Contact Number (24hr): Chemtel (800) 255-3924

Issue Date: 1/8/07

Revision Date: 6/5/08, 04/16/10, 02/19/12

Section 2 – Hazard Identification

Emergency Overview: Non-flammable, non-corrosive, non-toxic. Does not present significant health hazards. Wash areas of contact with water.

Appearance: Clear, purple colored liquid

Odor: Odorless

Target Organs: Eyes, skin

Potential Health Effects/ Routes of Exposure:

Eyes: May cause slight irritation.

Skin: May cause slight irritation

Ingestion: Large doses may cause upset stomach

Inhalation: Not likely to be a hazard

Chronic Effect / Carcinogenicity: None (IARC, NTP, OSHA)

Aggravated Medical Conditions No information available

These chemicals are considered hazardous by OSHA.

See section 11 for toxicological information. See section 12 for potential environmental effects.

Section 3 – Composition, Information on Ingredients

Water, purified, CAS# 7732-18-5, 99-100% w/v

Section 4 – First Aid

Eyes: Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.

Skin: Flush with water for 15 minutes. Get medical assistance if irritation develops.

Ingestion: DO NOT induce vomiting. Dilute with water or milk. Get medical assistance.

Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

Notes to Physician Treat symptomatically.

Section 5 – Fire Fighting Measures

Flash Point: Not Applicable **Autoignition Temperature** No information available.

Explosion Limits Upper No data available **Lower** No data available

Extinguishing Media: Use means suitable to extinguishing surrounding fire.

Unsuitable Extinguishing Media: No information available

Fire & Explosion Hazards: Not considered to be a fire or explosion hazard.

Fire Fighting Instructions / Equipment: Use normal procedures. Use protective clothing. Use NIOSH-approved breathing equipment.

Hazardous Combustion Products: No information Available

Sensitivity to mechanical impact No information available.

Sensitivity to static discharge No information available.

Specific Hazards Arising from the Chemical: No information available

NFPA Rating: (estimated) Health: 1; Flammable: 0; Reactivity: 0

Section 6 – Accidental Release Measures

Personal Precautions Use personal protective equipment. Ensure adequate ventilation.

Environmental Precautions Not relevant considering the small amounts used.

Methods for Containment and Clean Up Absorb with suitable material. Always obey local regulations.

Section 7 – Handling and Storage

Handling: Wash hands after handling. Avoid contact with skin and eyes.

Storage: Protect from freezing and physical damage.

Section 8 – Exposure Controls, Personal Protection

Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA

Engineering Measures/ General Hygiene: Normal ventilation is adequate. Ensure eyewash and safety showers are available.

Personal Protection Equipment: **Skin Protection:** Chemical resistant gloves.

Eye/Face Protection: Safety Glasses or goggles. **Respiratory Protection:** Normal ventilation is adequate

Section 9 – Physical and Chemical Properties

Appearance/Physical State: Clear, purple colored liquid

Odor: Odorless

Boiling Point: Approx 100C

Melting Point: Below 0

Vapor Density: No Information Available

Evaporation Rate: No Information Available

pH: No Information Available

Flammability: No Information Available

Solubility: Miscible
available

Relative Density: No Information Available

% Volatility: No Information Available

Specific Gravity: No Information Available

Vapor Pressure: No Information Available

Flash Point: Not Applicable

Coefficient of water/oil distribution: Not Available

Odor Threshold: Not Available

Decomposition Temperature: No Information Available

Partition Coefficient n-octanol/water: No data

Molecular Weight: Not available

Section 10 – Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.

Incompatible Materials: Strong Oxidizing agents, Lithium, Bromine, Trifluoride.

Conditions to Avoid: No Information Available.

Hazardous Decomposition Products: Oxides of Sodium and fumes of Chloride

Hazardous Polymerization: Does not occur

Hazardous Reactions: None under normal processing.

Section 11 – Toxicological Information

Routes of Exposure/Symptoms/Corrosiveness – See Section 2

LD50 orl-rat: No Information Available

LC50 inhalation-rat: No Information Available

Irritation: No Information Available

Toxicologically Synergistic: No Information Available

Chronic Exposure

Carcinogenicity No Information Available

Sensitization No information available.

Mutagenic Effects No information available.

Reproductive Effects No information available.
Developmental Effects (Immediate/Delayed) No information available.
Teratogenicity No information available.
Other Adverse Effects No Information Available.
Endocrine Disruptor Information No information available

Section 12 – Ecological Information

Ecotoxicity: No Information Available
Persistence and Degradability: No Information Available **Mobility:** No Information Available
Bioaccumulation/ Accumulation: No Information Available

Section 13 – Disposal Considerations

Dilute with water. Comply with all local, state, and federal regulations.

Section 14 – Transport Information

DOT - Not Regulated

Section 15 – Regulatory Information (not meant to be all inclusive)

OSHA Status: These chemicals are not considered hazardous by OSHA.
Canada DSL: Not available.
TSCA: The components of this solution are listed on the TSCA Inventory
SARA Title III Section 313: Not Applicable
RCRA Status: Not Applicable
CERCLA Reportable Quantity: Not Applicable
WHMIS: Not Applicable.

Section 16 – Additional Information

Disclaimer: The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.

Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Catalog Numbers: AD1582, AD1582-100
Product Identity: OP Tablets

Chemical Family: Not Applicable
Synonyms: Not Applicable
Recommended Use: Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291
Emergency Contact Number (24hr): Chemtel (800) 255-3924

Issue Date: 1/08/07
Revision Date: 06/05/08, 07/08/10, 02/19/12

Section 2 – Hazard Identification

Emergency Overview

May cause irritation to the eyes, skin and respiratory system. May cause autonomic nervous system and gastrointestinal disorders. Wash areas of contact with water.

Appearance: Small Solid Tablet **Odor:** Odorless

Target Organs: Eyes, skin, nervous system, gastrointestinal system, respiratory system

Potential Health Effects/ Routes of Exposure:

Eyes: May cause irritation.

Skin: May cause irritation and dermatitis.

Ingestion: Large doses may cause upset stomach

Inhalation: May cause respiratory tract irritation.

Chronic Effect / Carcinogenicity: No information found. (IARC, NTP, OSHA)

Aggravated Medical Conditions No information available

These chemicals are not considered hazardous by OSHA.

See section 11 for toxicological information. See section 12 for potential environmental effects.

Section 3 – Composition, Information on Ingredients

Adipic Acid, CAS# 124-04-9, 100% w/w

Section 4 – First Aid

Eyes: Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.

Skin: Flush with water for 15 minutes. Get medical assistance if irritation develops.

Ingestion: DO NOT induce vomiting. Dilute with water or milk. Get medical assistance.

Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

Notes to Physician Treat symptomatically.

Section 5 – Fire Fighting Measures

Flash Point: 196C **Autoignition Temperature** 420C

Explosion Limits Upper No data available **Lower** No data available

Extinguishing Media: Use water spray, dry chemical, chemical foam or carbon dioxide

Unsuitable Extinguishing Media: No information available

Fire & Explosion Hazards: No information available.

Fire Fighting Instructions / Equipment: Use normal procedures. Use protective clothing. Use NIOSH-approved breathing equipment.

Hazardous Combustion Products: No information Available

Sensitivity to mechanical impact No information available.

Sensitivity to static discharge No information available.

Specific Hazards Arising from the Chemical: Keep away from heat source.

NFPA Rating: (estimated) Health: 1; Flammable: 0; Reactivity: 0

Section 6 – Accidental Release Measures

Personal Precautions Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

Environmental Precautions No information available

Methods for Containment and Clean Up Sweep up and containerize for disposal.

Section 7 – Handling and Storage

Handling: Wash hands after handling. Avoid contact with skin and eyes.

Storage: Protect from freezing and physical damage. Store away from bases and oxidizing agents

Section 8 – Exposure Controls, Personal Protection

Adipic Acid, CAS# 124-04-9, ACGIH TLV: 5mg/m³, OSHA PEL: NA

Engineering Measures/ General Hygiene: Normal ventilation is adequate. Ensure eyewash and safety showers are available.

Personal Protection Equipment: Skin Protection: Chemical resistant gloves.

Eye/Face Protection: Safety Glasses or goggles. **Respiratory Protection:** Normal ventilation is adequate

Section 9 – Physical and Chemical Properties

Appearance/Physical State: Small Solid Tablets

Odor: Odorless

Boiling Point: 337C

Melting Point: 152C

Vapor Density: 5.04

Evaporation Rate: No information available

pH: No Information Available

Flammability: No Information Available

Solubility: No Information Available
available

Relative Density: No Information Available

% Volatility: No Information Available

Specific Gravity: No Information Available

Vapor Pressure: No Information Available

Flash Point: Not Applicable

Coefficient of water/oil distribution: Not Available

Odor Threshold: Not Available

Decomposition Temperature: No Information Available

Partition Coefficient n-octanol/water: No data

Molecular Weight: No Information Available

Section 10 – Stability and Reactivity

Chemical Stability: Under normal conditions product is stable.

Incompatible Materials: Strong oxidizing Agents, bases, strong reducing agents

Conditions to Avoid: Avoid dust, air, and heat.

Hazardous Decomposition Products: Carbon dioxide and carbon monoxide.

Hazardous Polymerization: Does not occur

Hazardous Reactions: None under normal conditions

Section 11 – Toxicological Information

Routes of Exposure/Symptoms/Corrosiveness – See Section 2

LD50 orl-rat: >11g/Kg

LC50 inhalation-rat: NA

Irritation: No Information Available

Toxicologically Synergistic: No Information Available

Chronic Exposure

Carcinogenicity No Information Available

Sensitization No information available.
Mutagenic Effects No Information Available.
Reproductive Effects No information available.
Developmental Effects (Immediate/Delayed) No information available.
Teratogenicity No information available.
Other Adverse Effects No information available.
Endocrine Disruptor Information No information available

Section 12 – Ecological Information

Ecotoxicity: No information Available
Persistence and Degradability: No Information Available **Mobility:** No Information Available
Bioaccumulation/ Accumulation: No Information Available

Section 13 – Disposal Considerations

Dilute with water.

Waste Disposal/Waste Disposal of Packaging: All chemical waster generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

Section 14 – Transport Information

DOT - Not Regulated

Section 15 – Regulatory Information (not meant to be all inclusive)

OSHA Status: These chemicals are not considered hazardous by OSHA.

Canada DSL: All ingredients are listed on Canada's DSL list.

TSCA: The component is listed on the TSCA Inventory.

SARA Title III Section 313: Not Applicable

RCRA Status: Not Applicable

CERCLA Reportable Quantity: 5000 lb

WHMIS: Non-controlled

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16 – Additional Information

Disclaimer: The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.