



Date: 08/15/2015

Revision: 00

Safety Data Sheet Starver[®] Test Kit Reagent A

Section 1: Identification

Product Identifier: Starver[®] Test Kit Reagent A

Other Means of Identification:

Recommended Use: Reagent for phosphate determination in aqueous solution.

Manufacturer's Name: Spec Chem Direct, Inc.

Corporate Address: 6506 S 209th St., Kent, WA, 98032

Manufacturer's Telephone: (253) 277-3143 (Monday-Friday, 8AM-5PM PT)

Emergency Phone Number: (253) 277-3143 (Monday-Friday, 8AM-5PM PT)

Section 2: Hazard(s) Identification

Hazard Classification: Harmful If Swallowed
Causes Burns

Signal Word: DANGER

Hazard statement(s): Harmful if swallowed
Causes severe skin burns and eye damage.

Pictograms:



Precautionary Statement(s): Keep out of reach of children. Do not breathe fumes, mists, vapors or spray. Do not get in eyes, on skin, or on clothing. Wash contacted areas thoroughly after handling. Avoid release to the environment. Wear protective gloves, protective clothing and eye or face protection.

Hazards Not Otherwise Classified: N/A

Ingredient(s) With Unknown Toxicity: 0% of the mixture consists of ingredient(s) with unknown acute toxicity.

Section 3: Composition/Information on Ingredients

Ingredients	% by weight	CAS #
Sulfuric Acid	34%	7664-93-9
Molybdate, Hexaammonium, Tetrahydrate	1% - 3%	12054-85-2
Antimony Potassium Tartrate	< 0.1%	28300-74-5
Other Non-Hazardous Ingredients	to 100%	Trade Secret

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

Impurities and Stabilizing Additives, Which Are Themselves Classified and Which Contribute to the Classification of the Chemical: None

The Chemical Name and Concentration of All Ingredients Which Are Classified As Health Hazards and Are Present Above Their Cut-Off/Concentration Limits or Present a Health Risk Below the Cut-Off/Concentration Limits: None

Chemicals Where a Trade Secret Is Claimed: The balance of this product contains non-hazardous ingredients.

Section 4: First-Aid Measures

Inhalation: First aid is not generally required. If in doubt, contact a Poison Information Center or a doctor.

Skin: Quickly and gently, blot or brush away excess chemical. Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Flush contaminated area with lukewarm, gently flowing water for at least 20-30 minutes, by the clock. If irritation persists, continue flushing. **DO NOT INTERRUPT FLUSHING.** If necessary, keep emergency vehicle waiting (show paramedics this SDS and take their advice). Seek urgent medical attention.

Eyes: Quickly and gently, blot or brush away chemical. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 20-30 minutes, by the clock, while holding the eyelid(s) open. Neutral saline solution may be used as soon as it is available. **DO NOT INTERRUPT FLUSHING.** If necessary, keep emergency vehicle waiting (show paramedics this SDS and take their advice). Take care not to rinse contaminated water into the unaffected eye or onto face. If irritation persists, repeat flushing. Call a Poisons Information Centre or a doctor urgently.

Ingestion: If swallowed, rinse mouth thoroughly with water and contact a Poison Information Center. Urgent hospital treatment is likely to be needed. Give activated charcoal if instructed.

Most Important Symptoms or Effects, and Any Symptoms That Are Acute or Delayed: N/A

Recommendations for Immediate Medical Care and Special Treatment Needed, When Necessary: N/A

Section 5: Fire-Fighting Measures

Suitable / Unsuitable Extinguishing Equipment: Not Combustible. Use extinguishing media suited to burning materials. Water fog or fine spray is the preferred medium for large fires. Aim to dilute the material with large quantities of water. If practical, contain diluted material and prevent from entering drains and water courses.

Specific Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. This product reacts with many metals liberating hydrogen gas which forms explosive mixtures with air. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Special Protective Equipment or Precautions for Fire Fighters: Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.

Section 6: Accidental Release Measures

Personal Precautions: Refer to Section 8: Exposure Controls/Personal Protection and Section 7: Handling and Storage.

Emergency Procedures: Because of the environmentally hazardous nature of this product, special care should be taken to restrict release to waterways or drains.

Methods and Materials for Containment and Cleanup: Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. Contaminated area may be neutralized by washing with weak or dilute alkali. Baking soda, washing soda and limestone are suitable. Dispose of per guidelines under Section 13: Disposal Considerations.

Section 7: Handling and Storage

Handling: Avoid contact with eyes, skin, and clothing. User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. User should remove clothing/PPE immediately if product gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing. Follow manufacturer's instructions for cleaning/maintaining PPE. If not such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Storage: Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Store away from bases, amines, zinc, tin, aluminum and their alloys.

Section 8: Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs): Unknown.

American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs): Unknown.

Any Other Exposure Limit Used or Recommended: Sulfuric Acid TWA (mg/m³) 1, STEL (mg/m³) 3.

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Appropriate Engineering Controls: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapors and mists are minimized.

Individual Protection Measures (Personal Protective Equipment – PPE): Your eyes must be completely protected from this product by splash resistant goggles with face shield. All surrounding skin areas must be covered. Emergency eye wash facilities must also be available in an area close to where this product is being used. Because of the dangerous nature of this product, make sure that all skin areas are completely covered by impermeable gloves, overalls, hair covering, apron and face shield. We suggest that protective clothing be made from rubber, butyl rubber, neoprene, Teflon, or polyethylene. Usually, no respirator is necessary when using this product. Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being used.

Section 9: Physical and Chemical Properties

Appearance: Clear viscous liquid.

Odor: No odor.

Odor threshold: No data.

pH: Expected to be about 0.0

Melting Point/Freezing Point: No specific data. Liquid at normal temperatures.

Initial Boiling Point and Boiling Range: Not available.

Flash Point: Does not burn.

Evaporation Rate: No data.

Flammability (Solid, Gas): Does not burn.

Upper/Lower Flammability or Explosive Limits: Does not burn.

Vapor Pressure: No data.

Vapor Density: No data.

Relative Density: 1.1-1.2

Solubility(ies): Completely soluble in water.

Partition Coefficient (n-octanol/water): No data.

Auto-ignition Temperature: Not applicable - does not burn.

Decomposition Temperature: Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Viscosity: No data available.

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Values should not be construed as a guaranteed analysis of any specific lot or as specifications.

Section 10: Stability and Reactivity

Reactivity: Inorganic acids react with inorganic and organic bases such as amines to form salts. They also react with many metals liberating hydrogen gas. These reactions are often rapid and typically liberate much heat. They can also decompose many organic materials such as esters, in a reaction called hydrolysis.

Chemical Stability: Material is stable under normal temperatures.

Possibility of Hazardous Reactions: This product is unlikely to undergo polymerization processes.

Conditions to Avoid: Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

Incompatible Materials: Bases, amines, zinc, tin, aluminum and their alloys.

Hazardous Decomposition Products: Oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds. Most will have a foul odor. Potassium compounds, antimony compounds.

Section 11: Toxicological Information

Likely Routes of Exposure (Inhalation, Ingestion, Skin and Eye Contact) and Delayed, Immediate, or Chronic Effects from Short- and Long-Term Exposure:

Inhalation

Short term exposure: Significant inhalation exposure is considered to be unlikely. Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation.

Long Term exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short term exposure: This product is corrosive to the skin. Capable of causing moderate to severe burns with ulceration. Can penetrate to deeper layers of skin, resulting in third degree burns. Corrosion will continue until product is removed or neutralized. Severity depends on concentration and duration of exposure. Burns may not be immediately painful; the onset of pain may be minutes to hours.

Long Term exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short term exposure: Exposure via eyes is considered to be unlikely. This product is corrosive to eyes. It will cause severe pain, and corrosion of the eye and surrounding facial tissues. Unless exposure is quickly treated, permanent blindness and facial scarring is likely.

Long Term exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short term exposure: Significant oral exposure is considered to be unlikely. Available data shows that this product is harmful. This product is corrosive to the gastrointestinal tract. Capable of causing moderate to severe burns with ulceration. Can penetrate to deeper layers of skin, resulting in third degree burns. Corrosion will continue until product is removed or neutralized. Severity depends on concentration and duration of exposure.

Long Term exposure: No data for health effects associated with long term ingestion.

Numerical Measures of Toxicity:

Oral LD₅₀: Not available.

Dermal LD₅₀: Not available.

Inhalation LC₅₀: Not available.

Description of the symptoms: No data available.

Carcinogenicity (NTP, IARC, or OSHA): This product is not known or reported to be carcinogenic by any reference source including NTP, IARC, or OSHA.

Section 12: Ecological Information (non-mandatory)

Ecotoxicity: It will not cause ecological problems because it does not enter biological systems.

Persistence and Degradability: This product does not degrade naturally, but will be neutralized and diluted in the natural environment.

Bioaccumulative Potential: Not available.

Mobility in Soil: Not available.

Other Adverse Effects: None known.

Section 13: Disposal Considerations (non-mandatory)

Appropriate Disposal Containers: Containers should be emptied as completely as practical before disposal. If possible, recycle containers either in-house or send to recycle company. If this is not practical, send to a commercial waste disposal site.

Recommended Appropriate Disposal Methods: This product should be suitable for landfill. Can be disposed of with household waste.

Physical and Chemical Properties That May Affect Disposal Activities: None.

Special Precautions for Landfills or Incineration Activities: None.

Do not dispose of into sewer or waterways.

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

To minimize exposure, refer to Section 8: Exposure Controls/Personal Protection

Section 14: Transport Information (non-mandatory)

UN Number: 3316.

UN Proper Shipping Name: 3316, CHEMICAL KIT or FIRST AID KIT

Transport Hazard Class(es): 2R.

Packing Group Number, if Applicable: II.

Environmental Hazards (e.g., Marine pollutant (Yes/No)): Unknown.

Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Unknown.

Special Precautions Which a User Needs to Be Aware of, or Needs to Comply With, in Connection With Transport or Conveyance Either Within or Outside Their Premises: Class 9 Miscellaneous Dangerous Goods shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 5.1 (Oxidizing Agents where the Miscellaneous Dangerous Goods are Fire Risk Substances), 5.2 (Organic Peroxides where the Miscellaneous Dangerous Goods are Fire Risk Substances). They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.1 (Flammable Gases), 2.2 (Non-Flammable, Non-Toxic Gases), 2.3 (Toxic Gases), 3 (Flammable liquids), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidizing Agents except where the Miscellaneous Dangerous Goods are Fire Risk Substances), 5.2 (Organic Peroxides except where the Miscellaneous Dangerous Goods are Fire Risk Substances), 6 (Toxic Substances), 7 (Radioactive Substances), 8 (Corrosive Substances), Foodstuffs and foodstuff empties.

Section 15: Regulatory Information (non-mandatory)

National and/or Regional Regulatory Information of the Chemical or Mixtures (Including Any OSHA, Department of Transportation, Environmental Protection Agency, or Consumer Product Safety Commission Regulations):

TSCA: Unknown.

CERCLA Reportable Quantity (RQ): Unknown.

OSHA: Unknown.

EPA: Unknown.

SARA Section 302: Unknown.

SARA Section 311/312: Unknown.

SARA Section 313: Unknown.

California Proposition 65: Unknown.

Section 16: Other Information

REVISION INFORMATION:

SDS sections(s) changed since last revision of document:

00 08/15/2015 Original SDS Document

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