

# SAFETY DATA SHEET

## Section 1. Chemical Product & Company Identification

Essence Chemical Company P.O. BOX 656 St. Peters, MO. 63376

636 685 0132

Product Name: PROTECT 600

Product Use: BOILER COMPOUND

Product Code: 30355

EMERGENCY NUMBER: 1-800-535-5053

## Section 2. Hazards Identification

Physical Hazards: Not Classified

Health Hazards: Serious eye damage/eye irritation

Category 2A

OSHA Defined Hazards: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). 3% of this product consists of ingredient(s) of unknown acute dermal toxicity.

Label Elements:



Signal Word: Warning

Hazard Statement: Causes serious eye irritation.

Precautionary Statements (Prevention): Wear eye and face protection.

Precautionary Statements (Response): If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists: get medical attention/advice.

Precautionary Statements (Storage): No precautionary storage phrases assigned.

Precautionary Statements (Disposal): Follow local/regional/national/international regulations.

Hazards Not Otherwise Classified: None known.

**Section 3. Composition/Information on Ingredients**

<u>Name of Hazardous Ingredients:</u>	<u>CAS Number</u>	<u>% by Weight</u>
TETRAPOTASSIUM PYROPHOSPHATE	7320-34-5	1-5

Due to Trade Secret, the exact percentage of composition has been stated as a range. The exact identities of other ingredients has also been withheld as Trade Secret. However, they do not contribute to the identified hazards of the product and will be divulged to proper authorities in an emergency.

**Section 4. First Aid Measures**

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation occurs, get medical advice/attention.

**Skin Contact:** Wash with plenty of water. If skin irritation occurs: get medical advice/attention. Take off contaminated clothing and wash it before reuse.

**Inhalation:** Move to fresh air. Call a physician if symptoms develop or persist or you feel unwell.

**Ingestion:** If swallowed: call a poison control center/doctor if you feel unwell. Rinse mouth with water.

**Most Important Symptoms/Effects, Acute & Delayed:** Eye itching, stinging, redness, tearing. Skin redness, itching.

**Indication of Immediate Medical Attention & Special Treatment Needed:** Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**Notes to physician:** Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach and lower gastrointestinal tract with subsequent stricture. Aspiration of vomitus may cause lung injury.

**Suggest endotracheal/esophageal control if lavage is done.** If burn is present, treat as any thermal burn, after decontamination. No specific antidote.

**Section 5. Fire Fighting Measures**

**Suitable Extinguishing Media:** Treat fire with agents suitable for surrounding fire. Water fog. Foam. Dry chemical powder. Carbon dioxide.

**Specific Hazards Arising From the Chemical:** During fire, gases hazardous to health may be formed, hydrogen chloride gas and calcium oxide.

**Special Protective Equipment and Precautions for Firefighters:** Self contained breathing apparatus and full protective clothing.

**Fire Fighting Equipment/Instructions:** Move containers from area if you can do so without risk.

**Specific Methods:** Use standard firefighting procedures and consider the hazards of other involved materials.

**General Fire Hazards:** No unusual fire or explosion hazards noted.



### ***Section 6. Accidental Release Measures***

**Personal Precautions, Protective Equipment & Emergency Procedures:** Keep unnecessary personnel away. Keep people away from and upwind of spill. Keep out of low areas. Wear appropriate protective equipment and clothing during clean up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

**Methods & Materials for Containment & Cleaning Up:** This product is soluble in water. Large spills: stop the flow of material, if this is without risk. Dike the spilled material, where possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small spills: wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spilled material to original container.

**Environmental Precautions:** Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

### ***Section 7. Handling and Storage***

**Precautions for Safe Handling:** Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for Safe Storage, including any Incompatibilities:** Store in original tightly closed container. Store away from incompatible materials (see sec. 10). Protect from atmospheric moisture.

### ***Section 8. Exposure Controls/Personal Protection***

**Occupational Exposure Guidelines:** Tetrapotassium Pyrophosphate Anhydrous;  
ACGIH TLV 10mg/m<sup>3</sup> (inhalable dust), 8hr TWA, 3mg/m<sup>3</sup> (respirable) 8hr. TWA  
OSHA PEL 15mg/m<sup>3</sup> (total dust) 8hr TWA, 5mg/m<sup>3</sup> (respirable) 8hr TWA

**Appropriate Engineering Controls:** Good general ventilation (generally 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product. It is recommended that users of this product perform a risk assessment to determine the appropriate PPE.



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**Individual Protection Measures, Personal Protective Equipment:**

**Eye/Face:** Wear eye protection with side shields and face protection.

**Skin/Body:** Wear chemical resistant gloves. Wear clean, body covering clothing. Wear appropriate clothing to avoid skin contact.

**Respiratory:** No special protective equipment is needed under normal use conditions.

**General Hygiene Considerations:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothes and protective equipment to remove contaminants.

**Section 9. Physical & Chemical Properties**

**Appearance:** Clear

**Physical State :** Liquid

**pH:** 10.0-11.0

**Boiling Point:** 230-252 F

**Vapor Pressure:** Not available

**Freeze Point:** Not available

**Evaporation Rate:** Not available

**Upper Flammability Limit:** Not available

**Explosive Properties:** Not available

**Water Solubility:** Soluble

**Decomposition Temperature:** Not available

**Oxidizing Properties:** Not available

**Color:** Dark green

**Odor:** Odorless

**Odor Threshold:** Not available

**Specific Gravity:** 1.068

**Flash Point:** >200 F.

**Flammability (solid, gas):** Non-flammable

**Lower Flammability Limit:** Not available

**Vapor Density:** Not available

**Auto-Ignition Temperature:** Not available

**Viscosity:** Water-like

**Other Solubilities:** Not available

**Section 10. Stability & Reactivity**

**Reactivity:** Not reactive

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur.

**Conditions to Avoid:** Do not mix with other chemicals. Avoid contact with incompatible materials.

**Incompatibility:** Strong oxidizing agents, ammonia, magnesium, sodium and calcium.

**Hazardous Polymerization:** Will not occur.

**Hazardous Decomposition Products:** Oxides of phosphorous.



**Section 11. Toxicological Information****INFORMATION ON LIKELY ROUTES OF EXPOSURE:**

**Inhalation:** Inhalation of mist may cause irritation of the respiratory system. Prolonged inhalation may be harmful.

**Ingestion:** Causes gastrointestinal tract irritation. Low toxicity if swallowed.

**Skin Contact:** May cause skin irritation. Brief contact is essentially non-irritating. Prolonged contact may cause irritation or even a burn.

**Eye Contact:** May cause serious eye irritation. May cause slight corneal injury. Effects may be slow to heal.

**COMPONENT INFORMATION:**

<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Tetrapotassium Pyrophosphate	>2980mg/kg (rat)	>7940mg/kg (rabbit)	N/A

**INFORMATION ON PHYSICAL, CHEMICAL, TOXICOLOGICAL EFFECTS:**

**Symptoms:** May cause skin irritation. Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory tract irritation if swallowed.

**DELAYED & IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT TERM EXPOSURE & LONG TERM EXPOSURE:**

**Carcinogenicity:** Not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA

**Respiratory Sensitization:** Not available.

**Skin Sensitization:** Not expected to cause skin sensitization.

**Germ Cell Mutagenicity:** No data available to indicate product is mutagenic or genotoxic.

**Reproductive Toxicity:** Not expected to cause reproductive toxicity.

**Specific Target Organ Toxicity, Single exposure:** Not classified

**Specific Target Organ Toxicity, repeated exposure:** Not classified.

**Aspiration Hazard:** Not available.

**Chronic Effects:** None noted.

**Section 12. Ecological Information**

**Ecotoxicity:** Practically non-toxic to aquatic life on an acute basis. LC50/EC50/EL50/LL50 >100mg/L in most sensitive species.

**Chemical**

>100mg/L 48hr EC50 Daphnia Magna, >100mg/L 96hr LC50 Mysid Shrimp, >100mg/L 96hr LC50 Rainbow Trout

**Persistence & Degradability:** Not believed to persist in the environment.

**Bioaccumulation:** Does not bioaccumulate.

**Mobility in Soil:** Not absorbed in soil due to dissociation properties.

**Other adverse Effects:** May be utilized as essential nutrients by plants. May cause eutrophication in aquatic systems characterized by excessive algal growth. Generally, no ecological risk.



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**Section 13. Disposal Considerations**

Disposal Instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local/regional/national/international regulations.

Hazardous Waste Code: N/A

Waste from Residues/Unused Products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see Disposal Instructions).

Contaminated Packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since empty containers may contain product residue, follow all label warnings even after container is emptied.

**Section 14. Transport Information**

<i>Regulatory Information</i>	<i>UN Number</i>	<i>Proper Shipping Name</i>	<i>Classes</i>	<i>PG*</i>	<i>Label</i>
DOT Classification: Not Hazardous					

NOTE: DOT Classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill Of Lading with your shipment.

PG\*: Packing Group

**Section 15. Regulatory Information**

**U.S. Federal Regulations:**

SARA 313 toxic chemical notification and release reporting:  
Not regulated.

CERCLA

Clean Water Act (CWA) 307: No.

Clean Water Act (CWA) 311: No

Clean Air Act (CAA) 112 Regulated Toxic Substances: No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

TSCA 8(a) IUR: Not regulated.

United States Inventory (TSCA 8b): Not regulated.

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US State Right to Know Regulations: No

State Regulations

California Prop 65: No products were found in sufficient amounts to require reporting.

**Section 16. Other Information**

NFPA: 1,0,0

HMIS: 1,0,0

Issue Date: July 18, 2017

Revision Date: N/A

Revision Note: N/A

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.*

*Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution.*

*Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

*\*Note: Hazard Determination System (HDS) ratings are on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on SDS's under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.*