

**Safety Data Sheet**

May be used to comply with OSHA's Hazard Communication Standard. 29 CFR 1910.1200. Standard must be consulted for specific requirements.

**U.S. Department of Labor**

Occupation Safety and Health Administration  
(Non-Mandatory Form)  
Form Approved  
OMB No. 1218-0072

IDENTITY (As Used on Label and List) <b>PRETREAT PLUS®-0100 CONCENTRATE</b> <b>Antiscalant</b>	Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.
--	--

<b>Section 1 - Identification</b>		
Manufacturer's Name <b>King Lee Technologies</b>	Emergency Telephone Number <b>1-800-424-9300 (Chemtrec)</b>	Emergency Telephone Number International <b>001-703-527-3887 (Chemtrec)</b>
Address (Number, Street, City, State and ZIP Code) <b>8949 Kenamar Drive Bldg. 107 San Diego, California 92121</b>	Telephone Number for Information <b>(858) 693-4062</b>	
	Date Prepared <b>January 1, 2017</b>	
Signature of Preparer (Optional)		

**Section 2 - Hazard(s) identification**


Other Limits

Hazardous Components (Specific Chemical Identity: Common Name(s)) OSHA PEL ACGIH TLV Recommended % (optional)

This product is a proprietary formulation of generally available chemical ingredients.

Complying with 29 CFR 1910.1200 (d), each ingredient in this formulation has been reviewed with the "Guide to Occupational Exposure Values - 2012" published by ACGIH. None of the ingredients have listed occupational exposure values, and can be considered generally safe if handled with due care a mild solution of the following acids:

Phosphonic acids.

Label elements	Signal Word	Hazard(s) not otherwise classified (HNOC)	Supplemental Information	Hazardous Statement
	Warning	None Known.	None.	Causes skin irritation. Causes serious eye damage.

**Section 3 - Composition/information on ingredients**

Hazardous Components (Specific Chemical Identity: Common Name(s)) OSHA PEL ACGIH TLV Recommended % (optional)

This product is a proprietary formulation of generally available chemical ingredients.

Complying with 29 CFR 1910.1200 (d), each ingredient in this formulation has been reviewed with the "Guide to Occupational Exposure Values - 2012" published by ACGIH. None of the ingredients have listed occupational exposure values, and can be considered generally safe if handled with due care a mild solution of the following acids:

Phosphonic Acids.

**Section 4, First-aid measures**

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
Health Hazards (Acute and Chronic)	Strong irritant; may cause burning of mucous membranes, eyes and skin.		
Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	NO	NO	NO

Signs and Symptoms of Exposure  
**Irritation and burning of eyes, skin, digestive or respiratory tract.**

Medical Conditions  
Generally Aggravated by Exposure  
**Exposed wounds.**

Emergency and First Aid Procedures

Eyes and skin - flush eyes with excess water. Wash from skin with soap and water. Inhaled - Remove subject to fresh air. Ingestion - rinse mouth and throat. Drink water or milk. In all cases, call or see a physician.

**Section 5 - Fire-fighting measures**

Flash Point (Method Used) NA	(Flammable Limits) NA	LEL NA	UEL NA
---------------------------------	--------------------------	-----------	-----------

Extinguishing Media

No Restrictions

Special Fire Fighting Procedures

Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.

Unusual Fire and Explosion Hazards

Product can form flammable phosphine gas when heated above 250<sup>0</sup> C

**Section 6 - Accidental release measures**

Steps to Be Taken in Case Material is Released or Spilled

Stop spill/release if possible with minimal risk. Dike far ahead of spill for later recovery or disposal. Notify appropriate agencies. Immediate clean up recommended.

Waste Disposal Method

Incinerate recovered liquid in accordance with local, state and federal regulations.  
Flush residual spill with water into sewer.

**Section 7 - Handling and Storage**

Precautions to Be Taken in Handling and Storing

Store in sealed drums kept in cool, dry place.

Incompatible materials: Metals, bases, amines, reducing agents, oxidizing materials. Violent reaction with alkalis.

Other Precautions

Wear protective equipment if possible.

Respiratory Protection (*Specific Type*)

Use NIOSH approved respirator if conditions warrant.

Ventilation	Local Exhaust Use in well-ventilated area.	Special Additional ventilation for handling large volumes.
	Mechanical ( <i>General</i> ) NA	Other NA

**Section 8 - Exposure controls/personal protection**

Protective Gloves

Water impenetrable gloves that can be washed.

Eye Protection

Chemical safety goggles recommendable.

Other Protective Clothing or Equipment

Work overalls would prevent contamination of street clothes.

Work/Hygienic Practices

Wash gloves and hands before touching anything else.

**Section 9 - Physical and chemical properties**

Boiling Point	> 100 <sup>0</sup> C	Specific Gravity (H <sub>2</sub> O=1)	1.4
Vapor Pressure (mm Hg.) (at 20 <sup>0</sup> C)	As water	Melting Point	NA
Vapor Density (AIR= 1)	NA	Evaporation Rate (Butyl Acetate= 1)	NA
			pH ≤ 2.0

Solubility in Water

Completely Soluble.

Appearance and Odor

Clear, colorless, odorless solution.

**Section 10 - Stability and reactivity**

Stability	Unstable		Conditions to Avoid Avoid heat and direct sun. Incompatible Materials: Metals, bases, amines, reducing agents, oxidizing materials. Violent reaction with alkalies.
	Stable	<b>X</b>	

Incompatibility (Materials to Avoid)

Avoid contact with caustic and strong oxidizing agents.

Hazardous Decomposition or Byproducts

If involved in a fire, oxides of phosphorous may be generated. Phosphine gas may be formed when heated beyond the evaporation of all the water.

Hazardous Polymerization	May Occur		Conditions to Avoid NA
	Will Not Occur	<b>X</b>	

**Section 11 - Toxicological information**

Mouse, Oral, LD<sub>50</sub>= 1800 mg/kg

**Section 12 - Ecological Information**

96 Hr LC50:            Rainbow Trout = > 368 mg/L  
                               Bluegill = 868 mg/L  
                               Sheepshead Minnow = 527 mg/L

**Section 13 - Disposal considerations**

Poses no acute toxicological properties that would require special handling, other than good hygienic practices.

**Section 14 - Transportation information**

DOT Hazardous Classification

US, Canada and International Transportation: Corrosive liquid, acidic, organic, N.O.S. (Contains Phosphonic Acids) 8, UN3265, III

TDG Canadian Transportation-

US, Canada and International Transportation: Corrosive liquid, acidic, organic, N.O.S. (Contains Phosphonic Acids) 8, UN3265, III

International Transportation

US, Canada and International Transportation: Corrosive liquid, acidic, organic, N.O.S. (Contains Phosphonic Acids) 8, UN3265, III

**Section 15 - Regulatory Information**

HMIS: Health=2 Fire=0 Reactivity=1 P=None

**Section 16 - Other Information**

This SDS is provided as an information resource only. The buyer assumes all responsibility for using and handling the product. In accordance with applicable federal, state and local regulations.