

# Safety Data Sheet

## SECTION 1

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### 1. GENERAL INFORMATION

#### **TRADE NAME & SYNONYMS**

PRETREAT PLUS®-0100

#### **RECOMMENDED USAGE**

ANTISCALANT

#### **DISTRIBUTOR**

King Lee Technologies

#### **MANUFACTURER'S ADDRESS**

MiChem, Inc.

1061 Martin Rd.

Williamston, SC 29697

**EMERGENCY CONTACT: CHEMTEL 1 (800) 255-3924**

#### **CHEMICAL NAME & SYNONYMS**

BLEND OF PHOSPHONIC ACIDS & WATER

#### **FORMULA**

TRADE SECRET

#### **DISTRIBUTOR'S PHONE NO.**

1 (858) 693-4062

#### **DISTRIBUTOR'S ADDRESS**

King Lee Technologies

8949 Kenamar Drive, Bldg. 107

San Diego, CA 92121

### 2. HAZARDS IDENTIFICATION

**DANGER! CAUSES SERIOUS EYE DAMAGE (H318). CAUSES SKIN IRRITATION (H315). MAY BE CORROSIVE TO METALS (H290).** 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. THIS PRODUCT MAY ADVERSELY REACT WITH A STRONG ALKALI SOLUTION.



#### **HMS RATING:**

**HEALTH: 2    FIRE: 0    REACTIVITY: 1    PERSONAL PROTECTION: X**  
(HAZARD SCALE: 0 = MINIMAL; 1 = SLIGHT; 2 = MODERATE; 3 = SERIOUS; 4 = SEVERE; \* = CHRONIC HAZARD)

### 3. INGREDIENTS

#### **PRINCIPAL HAZARDOUS COMPONENTS**

PHOSPHORUS ACID

CAS# 2809-21-4

#### **PERCENT**

10%

#### **THRESHOLD LIMIT VALUE (UNIT)**

## SECTION 2

### 4. FIRST AID MEASURES

#### **EMERGENCY FIRST AID**

**EYE CONTACT-** RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING (P305 + P351 + P338).

**SKIN CONTACT-** REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER (P303 + P361 + P353).

**INHALATION-** IF BREATHING IS DIFFICULT, REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING (P304 + P341).

**INGESTION-** IMMEDIATELY CALL A POISON CONTROL CENTER OR DOCTOR. RINSE MOUTH THOROUGHLY, DO NOT INDUCE VOMITING (P310 + P330 + P331).

#### **SYMPTOMS OF EXPOSURE**

IRRITATION AND BURNING OF EYES, SKIN, DIGESTIVE OR RESPIRATORY TRACT

#### **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**

IF IRRITATION DEVELOPS, WASH EXPOSED AREA WITH PLENTY OF WATER, REMOVE PERSON TO FRESH AIR, AND SEEK MEDICAL ATTENTION.

#### **PRIMARY ROUTES OF ENTRY**

EYE OR SKIN (EXPOSED WOUNDS)

**5. FIREFIGHTING MEASURES**

**SPECIAL FIRE FIGHTING PROCEDURES:** USE WATER SPRAY TO COOL FIRE EXPOSED SURFACES AND TO PROTECT PERSONNEL. ISOLATE FUEL SUPPLY FROM FIRE. AVOID SPRAYING WATER DIRECTLY INTO CONTAINER DUE TO DANGER OF BOIL OVER. PROTECTIVE CLOTHING AND SELF CONTAINED BREATHING APPARATUS SHOULD BE WORN WHEN FIGHTING FIRES INVOLVING CHEMICALS.

**EXTINGUISHING MEDIA**  
ALCOHOL FOAM, WATER SPRAY,  
DRY CHEMICAL, CARBON DIOXIDE

**UNUSUAL FIRE AND EXPLOSION HAZARDS**  
PRODUCT CAN FORM FLAMMABLE  
PHOSPHINE GAS WHEN HEATED ABOVE  
250 °C.

**6. ACCIDENTAL RELEASE MEASURES****SPILL RESPONSE**

**ABSORB SPILLAGE TO PREVENT MATERIAL-DAMAGE (P390).** IN CASE OF SPILL, REMOVE ALL SOURCES OF IGNITION. VENTILATE AREA. DIKE SPILLS WITH ABSORBENT MATERIAL AND SHOVEL INTO DRUMS FOR DISPOSAL. CONSULT AN EXPERT ON DISPOSAL OF RECOVERED MATERIAL AND INSURE CONFORMITY TO FEDERAL, STATE, AND LOCAL DISPOSAL REGULATIONS.

**EYE PROTECTION**  
SAFETY GOGGLES

**VENTILATION RECOMMENDED**  
MECHANICAL: ADEQUATE

**RESPIRATORY PROTECTION**  
NONE SHOULD BE NEEDED

**HYGIENIC PRACTICES IN HANDLING  
AND STORAGE**  
CLEAN UP ALL SPILLS

**OTHER PROTECTIVE EQUIPMENT**  
PROTECTIVE GLOVES

**7. HANDLING AND STORAGE**

**CONDITIONS OR MATERIALS TO AVOID**  
STRONG AKLALI SUBSTANCES/OXIDIZERS  
HEAT/DIRECT SUN

**INCOMPATIBILITY**  
STRONG ALKALI SUBSTANCES

**SPECIAL HANDLING PRECAUTIONS**

**KEEP ONLY IN ORIGINAL CONTAINER (P234). WEAR PROTECTIVE GLOVES AND EYE PROTECTION (P280). IN CASE OF INADEQUATE VENTILATION, USE RESPIRATORY PROTECTION (P285). STORE IN CORROSIVE RESISTANT CONTAINER WITH A RESISTANT INNER LINER (P406). KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT EAT, DRINK OR USE TOBACCO WHEN HANDLING THIS PRODUCT.**

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**OSHA PERMISSIBLE EXPOSURE LIMIT**  
NOT ESTABLISHED

**ACGIH THRESHOLD LIMIT VALUE**  
NOT ESTABLISHED

**CARCINOGEN-NTP PROGRAM**  
NA

**CARCINOGEN-IARC PROGRAM**  
NA

**PPE**

GLOVES, SAFETY GOGGLES/GLASSES AND AN APRON ARE REQUIRED WHEN HANDLING THIS PRODUCT. A NIOSH APPROVED RESPIRATOR IS OPTIONAL FOR USE WITH THIS PRODUCT, AND SHOULD BE PROVIDED BY USER.

**SECTION 3****9. PHYSICAL AND CHEMICAL PROPERTIES**

**BOILING POINT (°C)**  
ND

**RELATIVE DENSITY**  
1.06 ± 0.03

**VAPOR PRESSURE (MM HG)**  
AS WATER

**FLASH POINT**  
N/A

**VAPOR DENSITY (AIR=1)**  
N/A

**EVAPORATION RATE (BUTYL ACETATE=1)**  
N/A

**SOLUBILITY IN WATER**  
SOLUBLE

**APPEARANCE AND ODOR**  
CLEAR, COLORLESS, ODORLESS SOLUTION

**9. PHYSICAL AND CHEMICAL PROPERTIES CONT'D.****AUTO IGNITION TEMPERATURE**

ND

**pH-VALUE**

≤ 2.0

**FLAMMABLE LIMITS**

ND

**LEL UEL**

ND ND

**10. STABILITY AND REACTIVITY****STABILITY**

STABLE

**HAZARDOUS POLYMERIZATION**

WILL NOT OCCUR

**HAZARDOUS DECOMPOSITION PRODUCTS**

IF INVOLVED IN A FIRE, OXIDES OF PHOSPHORUS MAY BE GENERATED. PHOSPHINE GAS MAY BE FORMED WHEN HEATED BEYOND THE EVAPORATION OF ALL THE WATER.

**CONDITIONS OR MATERIALS TO AVOID**

AVOID CONTACT WITH CAUSTIC AND STRONG OXIDIZING AGENTS.

**11. TOXOLOGICAL INFORMATION**

MOUSE, ORAL, LD<sub>50</sub>=10,800 mg/kg

**SECTION 4****12. ECOLOGICAL INFORMATION**

96 Hr LC<sub>50</sub>:

RAINBOW TROUT = >3,500 mg/L

BLUEGILL = >8,500 mg/L

SHEEPSHEAD MINNOW = >19,000 mg/L

**13. DISPOSAL INFORMATION**

CONSULT AN EXPERT IN DISPOSAL AFTER MATERIAL HAS BEEN COLLECTED WITH ABSORBANT MATERIAL AND MOVED TO DISPOSAL DRUM OR OTHER APPROVED CONTAINER. KEEP MATERIAL FROM ENTERING WATERWAYS AND GROUND AROUND FACILITY. IF THIS OCCURS, CONTACT EMERGENCY PERSONNEL AND CLOSELY FOLLOW DIRECTIONS THEY PROVIDE.

**14. TRANSPORT INFORMATION**

PROPER SHIPPING NAME (49 CFR 172.101): UN 3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ORGANOPHOSPHONIC ACID)

D.O.T. HAZARD NAME (49 CFR 172.101): CORROSIVE

D.O.T. ID NUMBER (49 CFR 172.101): UN 3265

D.O.T. HAZARD CLASS (49 CFR 172.101): 8

**15. REGULATORY INFORMATION**

TSCA:

COMPONENTS OF THIS PRODUCT ARE LISTED ON TSCA INVENTORY.

CERCLA:

SARA TITLE III:

NONE OF THE INGREDIENTS ARE LISTED.

**16. OTHER INFORMATION**

THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DATA SHEET REPRESENTS, TO THE BEST OF MICHEM, INC.'S KNOWLEDGE AND BELIEF, AN ACCURATE REPRESENTATION AS TO THE KNOWN DATA FOR THIS MATERIAL. THE DATA HAS BEEN OBTAINED FROM A NUMBER OF SOURCES, AND MICHEM, INC. CANNOT GUARANTEE ITS ACCURACY, RELIABILITY OR COMPLETENESS, NOR CAN MICHEM, INC. ASSUME ANY LIABILITY FOR ANY LOSS OR DAMAGE ARISING OUT OF THE USE OF THIS DATA. IT IS THE USER'S RESPONSIBILITY TO EVALUATE THE INFORMATION IN A PRUDENT MANNER AND TO USE IT IN A MANNER THAT IS CONSISTENT WITH ITS PARTICULAR PURPOSE.

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