



FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:	1-800-654-6911 (OUTSIDE USA: 1-423-780-2970)
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: **DRICON® Fire Retardant**  
EPA Registration Number: 62190-9

### 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Arch Wood Protection, Inc.</b> 5660 New Northside Drive, NW Suite 1100 Atlanta, GA 30328	REVISION DATE:	10/21/2009
	SUPERCEDES:	11/15/2006
	MSDS Number:	000000003002
	SYNONYMS:	None
	CHEMICAL FAMILY:	Mixture
	DESCRIPTION / USE:	Fire Retardant
	FORMULA:	None established

### 2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	<b>Moderate to Severe Eye Irritant, Mild skin irritant, Mucous membrane irritant, Potential developmental hazard</b>
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Routes of Entry:	Inhalation, skin, eyes, ingestion
Chemical Interactions:	No known interactions
Medical Conditions Aggravated:	None known or reported

#### Human Threshold Response Data

Odor Threshold	Not established.
Irritation Threshold	Not established.

#### Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	2*	0	0	
NFPA	Not established			



Immediate (Acute) Health Effects

Inhalation Toxicity: Not expected to be toxic by inhalation. Inhalation of dust may cause irritation to the mucous membranes of the respiratory tract.

Skin Toxicity: Skin contact may cause minor irritation consisting of transient redness and/or swelling. This irritant effect would not be expected to result in permanent damage. Not expected to be toxic from dermal contact.

Eye Toxicity: May cause moderate to severe irritation, consisting of redness, swelling, and mucous membrane discharge to the conjunctiva. Any visual impairment or corneal damage (opacity) would be expected to clear within several days.

Ingestion Toxicity: Slightly toxic if swallowed. Ingestion may cause mild irritation of the gastrointestinal tract and may also cause gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting or diarrhea. Swallowing large amounts may result in headache, drowsiness or restlessness.

Acute Target Organ Toxicity: May cause mild skin irritation and moderate to severe eye irritation. Inhalation of dust may cause mucous membrane irritation (includes upper respiratory tract). Ingestion may cause gastrointestinal discomfort.

Prolonged (Chronic) Health Effects

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

Reproductive and Developmental Toxicity: A component of this product, boric acid has been evaluated in several laboratory animal species and in only one species was found to cause fetotoxicity at maternally toxic doses. Based on this data, this product may have the potential to cause developmental toxicity.

Inhalation: There are no known or reported effects from chronic exposure except for effects similar to those experienced from acute exposure.

Skin Contact: There are no known or reported effects from chronic exposure except for effects (if any) similar to those experienced from acute exposure.

Skin Absorption: There are no known or reported effects from chronic exposure.

Ingestion: There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure.

Sensitization: This material tested negative for skin sensitization in animals.

Chronic Target Organ Toxicity: There are no known or reported target organ effects from chronic exposure.

Supplemental Health Hazard Information : No additional health information available.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
Boric acid	10043-35-3	



Guanylurea Phosphate 17675-60-4

PHOSPHORIC ACID 7664-38-2

#### 4. FIRST AID MEASURES

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**General Advice:** Call a poison control center or doctor for treatment advice. For 24-hour emergency medical assistance, call Arch Chemical Emergency Action Network at 1-800-654-6911. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**Inhalation:** IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

**Skin Contact:** IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**Eye Contact:** IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**Ingestion:** IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

#### 5. FIRE FIGHTING MEASURES

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**Flammability Summary (OSHA):** Product is not known to be flammable, combustible, pyrophoric or explosive.

Flammable Properties

**Flash Point:** Not applicable

**Autoignition Temperature:** Not applicable

**Fire / Explosion Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Choose extinguishing media suitable for surrounding materials.

**Fire Fighting Instructions:** In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.

**Hazardous Combustion Products:** Oxides of nitrogen, Carbon monoxide, Carbon dioxide

**Upper Flammable / Explosive Limit, % in air:** Not applicable

**Lower Flammable / Explosive Limit, % in air:** Not applicable



## 6. ACCIDENTAL RELEASE MEASURES

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Personal Protection for Emergency Situations: Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.

### Spill Mitigation Procedures

Air Release:

Not applicable

Water Release:

This material is soluble in water. Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so.

Land Release:

Sweep up and place in suitable clean, dry containers for reclamation or later disposal. Contain all solids for treatment or disposal.

Additional Spill Information :

Remove all sources of ignition. Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.

## 7. HANDLING AND STORAGE

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Handling:

To maintain package integrity and to minimize "caking" of the product, bags should be handled on a "first-in, first-out" basis.

Storage:

Store in a cool dry place. Avoid creating dusts. Store in dry, indoor area with ambient temperature and atmospheric pressure. This product is sensitive to moisture. Moisture may cause "caking". Do not store where exposed to rain as the product is soluble in water and may be released. Maintain good housekeeping.

Incompatible Materials for Storage:

Metal hydride alkali metals strong reducing agents

Empty Container Warning:

Empty containers retain hazardous residue, dispose of accordingly. Packaging in good condition should be returned to the producer. Unusable empty packaging can normally be disposed of in a landfill, but confirm with your state and/or local regulations.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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Ventilation:

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.

### Protective Equipment for Routine Use of Product

Respiratory Protection :

Wear a NIOSH approved respirator if levels above the exposure limits are possible.

Respirator Type :

Wear a NIOSH approved N95 respirator.

Skin Protection :

Wear impervious gloves to avoid skin contact.



Eye Protection: Use chemical goggles. Emergency eyewash should be provided in the immediate work area.
Protective Clothing Type: Neoprene, Natural rubber, Polyvinyl chloride

Exposure Limit Data

Table with 4 columns: CHEMICAL NAME, CAS #, Name of Limit, Exposure. Rows include Boric acid and PHOSPHORIC ACID with various exposure limits and conditions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: solid
Form: granules



Color:	white
Odor:	ODORLESS
Molecular Weight:	None established
Specific Gravity :	1.4500
pH :	No data.
Boiling Point:	Not applicable
Freezing Point:	Not applicable
Melting Point:	No data
Density:	No data.
Vapor Pressure:	Not applicable
Vapor Density:	No data
Viscosity:	No data
Fat Solubility:	No data
Solubility in Water:	soluble
Partition coefficient n- octanol/water:	No data
Evaporation Rate:	No data
Oxidizing:	No data
Volatiles, % by vol.:	No data
VOC Content	No data
HAP Content	No data

## 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions. Product will not undergo hazardous polymerization.
Conditions to Avoid:	Sparks, open flame, other ignition sources, and elevated temperatures., Contact with incompatible substances
Chemical Incompatibility:	Metal hydride, alkali metals, strong reducing agents
Hazardous Decomposition Products:	Oxides of nitrogen, Carbon oxides
Decomposition Temperature:	No data

## 11. TOXICOLOGICAL INFORMATION

### Component Animal Toxicology

#### Oral LD50 value:

Boric acid	LD50	2,660 - 4,100 mg/kg	Rat
PHOSPHORIC ACID	LD50	= 1,530 mg/kg	Rat

#### Dermal LD50 value:

Boric acid	LD50	> 2,000 mg/kg	Rabbit
PHOSPHORIC ACID	LD50	= 2,740 mg/kg	Rabbit

#### Inhalation LC50 value:

Boric acid	Inhalation LC50	4 h	> 2 MG/L	Rat
PHOSPHORIC ACID	Inhalation LC50	1 h	> 0.850 MG/L	Rat



Product Animal Toxicity

Oral LD50 value: LD50 = 2,269 mg/kg Rat
Dermal LD50 value: LD50 > 2,000 mg/kg Rabbit
Inhalation LC50 value: Inhalation LC50 4 h > 2.1 MG/L Rat

Skin Irritation: Mild skin irritant
Eye Irritation: This material is expected to be moderately to severely irritating.
Skin Sensitization: This material tested negative for skin sensitization in animals.

Acute Toxicity: May cause mild skin irritation and moderate to severe eye irritation. Inhalation of dust may cause mucous membrane irritation (includes upper respiratory tract). Ingestion may cause gastrointestinal discomfort.

Subchronic / Chronic Toxicity: Not known or reported to cause subchronic or chronic toxicity.

Reproductive and Developmental Toxicity: A component of this product, boric acid has been evaluated in several laboratory animal species and in only one species was found to cause fetotoxicity at maternally toxic doses. Based on this data, this product may have the potential to cause developmental toxicity.

Boric acid Boric acid has been evaluated in several laboratory animal species and in only one species was found to cause fetotoxicity at maternally toxic doses.

PHOSPHORIC ACID This material has been tested and was found not to cause reproductive toxicity in laboratory animals.

Mutagenicity: This product was determined to be non-mutagenic in the Ames assay. Boric acid This product has been shown to be non-mutagenic based on a battery of assays.

PHOSPHORIC ACID This product was determined to be non-mutagenic in the Ames assay.

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

Boric acid This material did not cause cancer in long-term animal studies.

PHOSPHORIC ACID This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

12. ECOLOGICAL INFORMATION

Overview: No data for product. Individual constituents are as follows:

Ecological Toxicity Values for: Boric acid

Rainbow trout (Oncorhynchus mykiss) - 96 h LC50 > 800 mg/l
Bluegill - 96 h LC50 > 1,021 mg/l



Daphnia magna, - 48 h EC50= 133 mg/l

Ecological Toxicity Values for: PHOSPHORIC ACID

Mosquito fish - 96 h LC50 138 mg/l

### 13. DISPOSAL CONSIDERATIONS

**CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.**

Waste Disposal Summary : If this product becomes a waste, it will be a nonhazardous waste according to U.S. RCRA regulations. Dispose of in accordance with all Local, State, Federal, and Provincial Environmental Regulations.

Disposal Methods : As a nonhazardous waste, it should be disposed of in accordance with local, state and federal regulations.

### 14. TRANSPORT INFORMATION

Land (US DOT): Not Regulated  
Water (IMDG): Not Regulated ,

Flash Point: Not applicable  
Air (IATA): Not Regulated ,  
Emergency Response Guide Number: Not applicable

### 15. REGULATORY INFORMATION

**UNITED STATES:**

Toxic Substances Control Act (TSCA): This is an EPA registered pesticide.  
EPA Pesticide Registration Number: 62190-9

FIFRA Listing of Pesticide Chemicals (40 CFR 180): This product is regulated under the Federal Insecticide, Fungicide and Rodenticide Act. It must be used for purposes consistent with its labeling.

**Superfund Amendments and Reauthorization Act (SARA) Title III:**

Hazard Categories Sections 311 / 312 (40 CFR 370.2):  
Health Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard  
Physical None



Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

ZUS\_SAR302 TPQ (threshold planning quantity) None established

Reportable Quantity (49 CFR 172.101, Appendix):

ZUS\_CERCLA Reportable quantity Phosphoric acid Value: 5,000lbs
ZUS\_SAR302 Reportable quantity None established

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

ZUS\_SAR313 De minimis concentration None established

Clean Air Act Toxic ARP Section 112r:

CAA 112R None established

Clean Air Act Socmi:

HON SOC None established

Clean Air Act VOC Section 111:

CAA 111 None established

Clean Air Act Haz. Air Pollutants Section 112:

ZUS\_CAAHAP None established

ZUS\_CAAHRP None established

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

Table with 2 columns: CAS #, COMPONENT NAME. Row 1: 7664-38-2, PHOSPHORIC ACID. Row 2: ZUSPA\_RTK

Pennsylvania: Hazardous substance list 1989-08-11 PHOSPHORIC ACID Environmental hazard

New Jersey:

Table with 2 columns: CAS #, COMPONENT NAME. Row 1: 7664-38-2, PHOSPHORIC ACID. Row 2: ZUSNJ\_RTK



New Jersey Right to Know Hazardous Substance List (RTK-HSL)  
2007-03-01  
PHOSPHORIC ACID  
Special Health Hazard - Corrosive

**Massachusetts:**

CAS #	COMPONENT NAME
7664-38-2	PHOSPHORIC ACID

ZUSMA\_RTK

Massachusetts Right to Know List of Chemicals and Hazard Classifications  
1993-04-24  
PHOSPHORIC ACID

**California Proposition 65:**

CAS #	COMPONENT NAME
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ZUSCA\_P65                      None established

**WHMIS Hazard Classification:**

Ingredient Disclosure List (WHMIS)  
2007-08-24  
Threshold limits: 1 Weight percent  
127  
Phosphoric acid

Ingredient Disclosure List (WHMIS)  
2007-08-24  
Threshold limits: 1 Weight percent  
67  
Boric acid

**16. OTHER INFORMATION**

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MSDS REVISION STATUS :      Revised to meet the ANSI standard of 16 sections  
SECTIONS REVISED:            1  
Major References :            Available upon request.



**Arch Wood Protection, Inc.**

**MATERIAL SAFETY  
DATA SHEET**

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. ARCH CHEMICALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT. .