



# Whiting Systems, Inc.

Automated Vehicle Wash Systems

Industrial Power Wash Systems

Est. 1974

## SAFETY DATA SHEET

Issue Date 29-Nov-2004

Revision Date 31-Jan-2013

Version 1

### 1. IDENTIFICATION

**Product Identifier**

**Product Name** SmartWash Rail Bright

**Other means of identification**

**SDS #** WS-027

**UN/ID No** UN1805

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Cleaning agent.

**Details of the supplier of the safety data sheet**

**Supplier Address**

Whiting Systems, Inc.  
9000 Highway 5 North  
Alexander, AR 72002

**Emergency telephone number**

**Company Phone Number** 1-800-542-9031  
**Emergency Telephone** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

### 2. HAZARDS IDENTIFICATION

**Classification**

Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1

**Signal word**

**Danger**

**Hazard statements**

Harmful in contact with skin  
Harmful if inhaled  
Causes severe skin burns and eye damage



**Appearance** Green liquid

**Physical state** Liquid

**Odor** Characteristic acidic odor

**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection  
 Use only outdoors or in a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor/physician  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 Wash contaminated clothing before reuse  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

May be harmful if swallowed

**Other Information**

- Harmful to aquatic life with long lasting effects
- Harmful to aquatic life

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%	Trade Secret
Phosphoric acid	7664-38-2	<30	*
2-Butoxyethanol	111-76-2	7-13 <sup>1</sup>	*

**4. FIRST AID MEASURES**

**First aid measures**

**Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician if you feel unwell.

**Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.

<sup>1</sup>

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<b>Ingestion</b>	Rinse mouth. Drink two glasses of water followed by milk, milk of magnesia, or other nonalcoholic liquids. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
<b>Skin Contact</b>	Wash off immediately with plenty of water. Wash with soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. Call a physician if you feel unwell. If skin irritation persists, call a physician.

**Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	May cause irritation to the mucous membranes and upper respiratory tract. Contact will cause irritation and redness to exposed areas. May cause severe irritation with redness, pain, and blurred vision.
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**Indication of any immediate medical attention and special treatment needed**

<b>Note to physicians</b>	Treat symptomatically. Existing conditions aggravated by exposure: skin disorders, skin allergies, respiratory disorders, eye disorders.
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## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Carbon dioxide (CO<sub>2</sub>). Water. Water spray (fog). Dry chemical. Chemical foam.

**Unsuitable Extinguishing Media** Not determined.

**Specific hazards arising from the chemical**

Keep containers cool with water spray to prevent container rupture due to steam buildup. Contents are corrosive and all personal contact must be avoided. Contact with B:C extinguisher powder may produce large amounts of carbon dioxide.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Use personal protective equipment as required.
<b>Environmental precautions</b>	For spills in excess of allowable limits (RQ) notify the National Response Center (800) 424-8802; refer to SARA Title III, Section 313 40 CFR 372, and CERCLA 40 CFR 302 for detailed instructions concerning reporting requirements.

**Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Wash small spills to sanitary sewer. Large spills-confine spill, soak up with approved absorbent, and shovel product into approved container for disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Use only in well-ventilated areas. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Protect container from physical damage.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep locked up and out of reach of children. Protect from extreme temperatures. Store away from incompatible materials.

**Incompatible materials** Strong oxidizing agents. strong acids. Strong alkalis. Metallic powders. other easily oxidized organic materials. Reducing agent.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phosphoric acid 7664-38-2	STEL: 3 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup> (vacated) STEL: 3 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>
2-Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits. Provide sufficient mechanical ventilation to maintain exposure below TLV(s). Eyewash stations.

**Individual protection measures, such as personal protective equipment**

- Eye/face protection** Wear approved safety goggles.
- Skin and body protection** Neoprene, butyl or nitrile rubber gloves with cuffs. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
- Respiratory protection** None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Respiratory protection must be provided in accordance with OSHA regulations (29 CFR1910.134) or European Standard EN 149, as applicable.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Odor</b>	Characteristic acidic odor
<b>Appearance</b>	Clear liquid	<b>Odor threshold</b>	Not determined
<b>Color</b>	Clear		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	1.0-1.5		
<b>Melting point/freezing point</b>	Not determined		
<b>Boiling point/boiling range</b>	100 °C / 212 °F		
<b>Flash point</b>	Non-flammable		

<b>Evaporation rate</b>	<1	(water = 1)
<b>Flammability (solid, gas)</b>	n/a-liquid	
<b>Flammability Limits in Air</b>		
<b>Upper flammability limits</b>	Not applicable	
<b>Lower flammability limit</b>	Not applicable	
<b>Vapor pressure</b>	17 mm Hg	@ 20 °C
<b>Vapor density</b>	>1	(Air=1)
<b>Specific Gravity</b>	1.131	
<b>Water solubility</b>	Completely soluble	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition coefficient</b>	Not determined	
<b>Autoignition temperature</b>	Not determined	
<b>Decomposition temperature</b>	Not determined	
<b>Kinematic viscosity</b>	Not determined	
<b>Dynamic viscosity</b>	Not determined	
<b>Explosive properties</b>	Not determined	
<b>Oxidizing properties</b>	Not determined	

**Other Information****10. STABILITY AND REACTIVITY****Reactivity**

Not reactive under normal conditions

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous polymerization**

Hazardous polymerization does not occur.

**Conditions to avoid**

Extreme temperatures.

**Incompatible materials**

Strong oxidizing agents. strong acids. Strong alkalis. Metallic powders. other easily oxidized organic materials. Reducing agent.

**Hazardous Decomposition Products**

Decomposition will not occur if handled and stored properly. In case of fire, oxides of carbon, hydrocarbons, fumes or vapors, and smoke may be produced.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information****Inhalation**

Harmful if inhaled.

**Eye contact**

Causes severe eye damage.

**Skin Contact**

Harmful in contact with skin. Causes severe skin burns.

**Ingestion**

May be harmful if swallowed.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Phosphoric acid 7664-38-2	1530 mg/kg ( Rat )	2730 mg/kg ( Rabbit )	>850 mg/m <sup>3</sup> ( Rat ) 1 h
2-Butoxyethanol 111-76-2	470 mg/kg ( Rat )	220 mg/kg ( Rabbit ) 2270 mg/kg ( Rat )	2.21 mg/L ( Rat ) 4 h 450 ppm ( Rat ) 4 h

### Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Carcinogenicity** Not classifiable as a human carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Butoxyethanol 111-76-2	A3	Group 3		

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 3 IARC components are "not classifiable as human carcinogens"

### Numerical measures of toxicity- Product

Not determined

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 2527 mg/kg

ATEmix (dermal) 1795 mg/kg

ATEmix (inhalation-gas) 180000 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic life Harmful to aquatic life with long lasting effects

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Phosphoric acid 7664-38-2		3 - 3.5: 96 h <i>Gambusia affinis</i> mg/L LC50		4.6: 12 h <i>Daphnia magna</i> mg/L EC50
2-Butoxyethanol 111-76-2		1490: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 2950: 96 h <i>Lepomis macrochirus</i> mg/L LC50		1698 - 1940: 24 h <i>Daphnia magna</i> mg/L EC50 >1000: 48 h <i>Daphnia magna</i> mg/L EC50

### Persistence and degradability

Not determined.

### Bioaccumulation

Not determined.

### Mobility

Not determined.

Chemical Name	Partition coefficient
2-Butoxyethanol 111-76-2	0.81

**Other adverse effects** Not determined

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

Chemical Name	California Hazardous Waste Status
Phosphoric acid 7664-38-2	Corrosive

### 14. TRANSPORT INFORMATION

#### DOT

**UN/ID No** UN1805  
**Proper shipping name** Phosphoric acid solution  
**Hazard Class** 8  
**Packing Group** III  
**Reportable Quantity (RQ)** phosphoric acid 5000 lbs

#### IATA

**UN/ID No** UN1805  
**Proper shipping name** Phosphoric acid solution  
**Hazard Class** 8  
**Packing Group** III

#### IMDG

**UN/ID No** UN1805  
**Proper shipping name** Phosphoric acid solution  
**Hazard Class** 8  
**Packing Group** III

### 15. REGULATORY INFORMATION

#### International Inventories

##### Legend:

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances IECSC*

*- China Inventory of Existing Chemical Substances KECL -*

*Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

#### US Federal Regulations

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
2-Butoxyethanol - 111-76-2	111-76-2	7-13	1.0

**SARA 311/312 Hazard Categories**

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphoric acid 7664-38-2	5000 lb			X

  

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phosphoric acid 7664-38-2	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

**US State Regulations**

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Phosphoric acid 7664-38-2	X	X	X
2-Butoxyethanol 111-76-2	X	X	X

**U.S. EPA Label Information**

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	Not determined	Not determined	Not determined	Not determined
<b><u>HMIS</u></b>	<b>Health hazards</b>	<b>Flammability</b>	<b>Physical hazards</b>	<b>Personal protection</b>
	3	0	0	Not determined

**Issue Date** 29-Nov-2004

**Revision Date** 1-May-2014

**Revision Note**

new format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**