



Whiting Systems, Inc.

Automated Vehicle Wash Systems

Industrial Power Wash Systems

Est. 1974

SAFETY DATA SHEET

Issue Date 29-Nov-2004

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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 Clear 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 ¹	*

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.

¹

Ingestion	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.
Skin Contact	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

Symptoms	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

Note to physicians	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 (CO₂). 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

Personal precautions	Use personal protective equipment as required.
Environmental precautions	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

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	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 ³ TWA: 1 mg/m ³	TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³ (vacated) STEL: 3 mg/m ³	IDLH: 1000 mg/m ³ TWA: 1 mg/m ³ STEL: 3 mg/m ³
2-Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³

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

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

Evaporation rate	<1	(water = 1)
Flammability (solid, gas)	n/a-liquid	
Flammability Limits in Air		
Upper flammability limits	Not applicable	
Lower flammability limit	Not applicable	
Vapor pressure	17 mm Hg	@ 20 °C
Vapor density	>1	(Air=1)
Specific Gravity	1.131	
Water solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic viscosity	Not determined	
Explosive properties	Not determined	
Oxidizing properties	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 ³ (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

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

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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