

Automated Vehicle Wash System



Systems Industrial Power Wash

Issue Date 09-Aug-2006

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Version 1

1. IDENTIFICATION

Product Identifier

Product Name SmartWash Bugs Off

Other means of identification

SDS # WS-010

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

Specific target organ toxicity (single exposure)	Category 3
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Signal word

Warning

Hazard statements

May cause respiratory irritation. May cause drowsiness or dizziness



Appearance Clear, colorless liquid

Physical state Liquid

Odor Chemical odor

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

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

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not Applicable

Other Information

Not Applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Trade Secret
1-Methoxy-2-propanol	107-98-2	10-30	*
1,2 Propanediol	57-55-6	7-13	*

4. FIRST AID MEASURES

First aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. 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. If eye irritation persists: Get medical advice/attention.
Ingestion	If swallowed, do not induce vomiting except at the direction of medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
Skin Contact	Wash with soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. 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. Prolonged breathing of vapors may cause nausea, headache, weakness and/or dizziness. Direct contact with eyes may cause temporary irritation. Ingestion of large amounts may be irritating if product is swallowed, may cause nausea, headache, vomiting and/or diarrhea.
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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. Floor will become slippery if material is released.

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.

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. Wash spill area with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Use only in well-ventilated areas. 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. Store locked up. Protect from extreme temperatures.

Incompatible materials Strong oxidizing agents. strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1-Methoxy-2-propanol 107-98-2	STEL: 150 ppm TWA: 100 ppm	(vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 540 mg/m ³	TWA: 100 ppm TWA: 360 mg/m ³ STEL: 150 ppm STEL: 540 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	Chemical odor
Appearance	Clear, colorless liquid	Odor threshold	Not determined
Color	Colorless		
Property	Values	Remarks • Method	
pH	7.5-7.8		
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	0.997		
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.
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Conditions to avoid

Extreme temperatures. Keep from freezing.

Incompatible materials

Strong oxidizing agents. strong acids.

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	Avoid breathing vapors or mists.
Eye contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Ingestion	Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
1-Methoxy-2-propanol 107-98-2	= 5200 mg/kg (Rat)	= 13000 mg/kg (Rabbit)	= 54.6 mg/L (Rat) 4 h > 24 mg/L (Rat) 1 h
1,2 Propanediol 57-55-6	= 20000 mg/kg (Rat)	= 20800 mg/kg (Rabbit)	-

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 This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

STOT - single exposure May cause respiratory irritation. May cause drowsiness or dizziness.

Numerical measures of toxicity- Product

Not determined

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

ATEmix (oral)	22989 mg/kg
ATEmix (dermal)	49505 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea

1-Methoxy-2-propanol 107-98-2		20.8: 96 h Pimephales promelas g/L LC50 static 4600 - 10000: 96 h Leuciscus idus mg/L LC50 static	23300: 48 h Daphnia magna mg/L EC50
1,2 Propanediol 57-55-6	19000: 96 h Pseudokirchneriella subcapitata mg/L EC50	51600: 96 h Oncorhynchus mykiss mg/L LC50 static 41 - 47: 96 h Oncorhynchus mykiss mL/L LC50 static 51400: 96 h Pimephales promelas mg/L LC50 static 710: 96 h Pimephales promelas mg/L LC50	10000: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined.

Chemical Name	Partition coefficient
1-Methoxy-2-propanol 107-98-2	-0.437

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.

14. TRANSPORT INFORMATION**DOT**

Not regulated

IATA

Not regulated

IMDG

Not regulated

15. REGULATORY INFORMATION**International Inventories****Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - 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

SARA 311/312 Hazard Categories

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
1-Methoxy-2-propanol 107-98-2	X	X	X
1,2 Propanediol 57-55-6	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
	1	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