

# EMS Ready-Mix Truck Wash and Wax

WORLD'S ONLY NON-D.O.T. REGULATED AND OEM-APPROVED TRUCK WASH

- **Removes Concrete**
- **Non-Corrosive**
- **100% Acid Free**
- **Removes Grease & Soot**
- **Eliminates Rust**
- **Safe on Glass & Chrome**
- **Polymerized Wax**
- **Removes Mag Chloride**
- **One-Step Process**
- **Non D.O.T. Regulated**
- **Exceeds OSHA and EPA Requirements**
- **Safe on Skin**

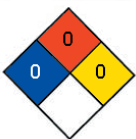
Until now, the only effective way to remove concrete from ready-mix trucks has been to use harsh acids. While these acids eat away the concrete, they pose significant dangers to the truck, the environment and to the person washing it.

EMS Ready-Mix Wash and Wax is a non-corrosive, non-skin irritant, and biodegradable truck wash that removes concrete as effectively as traditional acids. Powered by SynTech®, the world's only synthetic acid, Ready-Mix Wash and Wax earns a triple zero HMIS score. Its unmatched safety profile earns the recommendation of industry giants Mack, Oshkosh, McNeilus and many others -- a claim no other wash can make.

Along with SynTech, this all-in-one wash contains the finest grease cutters, detergents, brighteners, natural rust inhibitors and natural bean waxes. A simple one-step application quickly removes grease, oil, rust, grime, dirt, diesel stains and soot and protects your substantial investment from the elements. Apply and rinse. No neutralizing step is required. It is so safe it can even be left on overnight to loosen the heaviest buildup.

And because Ready-Mix Wash and Wax contains no acid and is non-corrosive, you can apply it to any part of the truck, including glass, chrome, aluminum, rubber, plastic and paint. This makes EMS Ready-Mix Wash and Wax unique to all other washes, and why it is the world's only truck wash to earn Original Equipment Manufacturer (OEM) approvals.

Other washes will claim they are environmentally safe. However their active ingredients which remove concrete also corrode, releasing trace metals, which violates EPA regulations. Ready-Mix Wash and Wax exceeds all D.O.T. corrosion and EPA requirements and, as such, requires no secondary containment.



## Technical Data

NITRATE LEVEL: **0% - None**  
FORM: **Liquid**  
ODOR: **Mild Soapy Odor**  
COLD STABILITY: **-37° F**  
DETERGENCY: **Excellent**  
TOXICITY: **Non Toxic**  
WETTING ABILITY: **Excellent**  
STORAGE STABILITY: **3 Years**

SHIPPER REGULATIONS: **None**  
FLASH POINT: **None**  
BOILING POINT: **212° F**  
SOLUBILITY IN WATER: **100%**  
BIODEGRADABLE: **Yes/100%**  
VOLATILE BY VOLUME: **N/A**  
CARCINOGENS: **None**  
VISCOSITY: **Thin**

## Dissolving Properties

Calcium Carbonate Dissolving Properties of Acids with 3 Minute Exposure

Acid	% Dissolved
HCl (Muriatic)	8.9
<b>Ready-Mix Truck Wash and Wax</b>	<b>8.3</b>
Sulfamic	1.6
Formic	0.7
Phosphoric	0.9
Citric	0.0
Lactic	0.2
Acetic	0.1
Glycolic	0.2
Gluconic	0.1
Rydlyme	0.3
Oxalic	0.0
Malic	0.4

### Test Conditions

200 grams of 5% active solution  
1 Calcium Carbonate Cube  
3 Minutes @ 70° F

Clearly, Ready-Mix Wash and Wax out performs other acids when it comes to dissolving calcium carbonate, except HCl (Muriatic) which is highly corrosive.

## Metal Studies

Dept. of Transportation (D.O.T.) Test Protocols as per Section 173.154 Exceptions for Class 8 (corrosive materials): The material being tested must be proven to be non-destructive or not to cause irreversible alterations in human skin tissue. Testing was conducted on an albino rabbit.

**Conclusion:** Ready-Mix Wash and Wax was proven to be NON DESTRUCTIVE on human skin tissue.

**Metal Test Limits:** D.O.T. Classifies a material to be CORROSIVE if it has a corrosion rate that exceeds 6.25 mmpy on SAE C1020 carbon steel or 7075-Y6 Aluminum.

Results of Ready-Mix Wash & Wax: SAE 1020 carbon steel = 0.19 mmpy  
7075-Y6 aluminum = 0.67 mmpy

**Conclusion:** Ready-Mix Wash and Wax is NON-CORROSIVE

## Dilution Specifications

New, reconditioned or well kept trucks:  
**Dilute 6:1**

Moderate buildup and regularly washed trucks:  
**Dilute 4:1**

Heavy buildup and seldomly washed trucks:  
**Dilute 2:1**

Extra Heavy buildup, rarely washed trucks:  
**Dilute 1:1**

Spray or brush on, agitate, rinse. Repeat as needed.

## Toxicity Studies

**Toxicity Limits: Test Procedure OECD 202, 48 hr.**  
LC 50 = 15 mg/l LD 50 = 117 mg/kg (rat oral)

**Mutagenicity Limits: OECD Guidelines Sec. 471 Chemicals**  
Ready-Mix Wash and Wax was found NOT TO BE MUTAGENIC

### Dermal Irritation & Corrosion Test

A modified Draize method was used as described in OECD Guidelines for the Testing of Chemicals Sec. 404 and complies with the requirements of OECD Principles of GLP, Annex revised as of July 1992.

Ready-Mix Wash and Wax received a Primary Irritation Score of .51 +/-0.2 and is classified as a "Non-Skin Irritant"

### Biodegradation & Aquatic Safety

Test Procedure: Hach Reactor Digestion method for Waste Water and Sea Water. Hach Reactor Digestion Method is a semi-micro adaptation of the Standard Methods.

Test Results Conclude Ready-Mix Wash and Wax was found to be 100% Biodegradable

COD = **320 mg/L**

BOD = **No Detectable Limits**

## Classifications & Approvals

**D.O.T., TDG, IMO, IATA, IMDG, SARA 313 311/312, California Prop 65**  
NON-Regulated

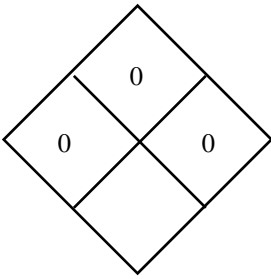
### FDA

Approved as Safe (GRAS)  
(CGMP) CFR 184.1923

### USDA Authorization

A1, A2, A3, A4, A7, A8, C2,  
G6 & G7

Additional Studies & Results: When tested, Ready-Mix Wash and Wax showed no potential for the generation of Carbon Dioxide under NIOSH 7903, OSHA & ACGIH testing protocols governing workplace environments.



# Material Safety Data Sheet



This MSDS complies with OSHA's Hazard Communication Standard, 29 CFR 1910.1200 and OSHA FORM 174. OMB No. 1218-0072

Identity (Trade Name As Used On Label)

## SECTION 1 - COMPANY/PRODUCT INFORMATION

Manufacturer's Name: Environmental Manufacturing Solutions, L.L.C.

Address: 7705 Progress Circle

Melbourne, Florida 32904

Phone Number (For Information): 321-837-0050

Emergency Phone Number (Chemtrec) 800-424-9300

IDENTITY: READY-MIX TRUCK WASH & WAX

CAUSE FOR MSDS: NON REGULATED

MSDS Number: N/A

Date Prepared: REVISED 05/07/04

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

## SECTION 2 - HAZARD INGREDIENTS/IDENTITY INFORMATION

COMPONENTS - Chemical Name & Component Names (Hazardous Components 1% or greater. Carcinogens 1% or greater)	OSHA PEL	ACGIH TLV	OTHER LIMIT RECOMMENDED
PROPRIETARY TRADE SECRET PERMITTED	N/A	N/A	N/A
Non-Regulated as per Chapter 62-761 F.A.C.			
NON-HAZARDOUS / NON-REGULATED/NON-NITRATE FORMULA			
NONE AS PER 29CFR Part 1910.1200.			
See Section—Federal Register Vol. 48 No. 228 Nov. 25, 1983 Rules & Regulations			

## SECTION 3 - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point 212° F	Specified Gravity (H2O = 1) 1.10
Vapor Pressure (mm Hg.) 18	Melting Point N/A
Vapor Density >1	Evaporation Rate (Butyl Acetate = 1) <.01
Solubility In Water 100%	Appearance and Odor Clear to Light Yellow, Mild Soapy Odor

## SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used) None	Flammable Limits None	LEL N/A
Extinguisher Media None	Special Fire Fighting Procedures None	UEL N/A
Unusual Fire and Explosion None Known		

## SECTION 5 - REACTIVITY DATA

STABILITY: Unstable No Stable Yes-100%

CONDITIONS TO AVOID: None Known

Incompatibility (Materials to Avoid) Strong Caustics Such as Sodium Hydroxide

Hazardous Decomposition or Byproducts None Known

HAZARDOUS POLYMERIZATION: May Occur No Will Not Occur Yes

CONDITIONS TO AVOID: None Known

N/A

## SECTION 6 - HEALTH HAZARD DATA

ROUTE(S) OF ENTRY: Inhalation? No Skin? No Ingestion? Yes

HEALTH HAZARDS (*Acute and Chronic*) If Ingested, May cause loose Stools. Drink Plenty of Water and Consult a Physician. Do not Induce Vomiting.

N/A

N/A

CARCINOGENICITY: NTP? No IARC No OSHA Regulated? No

SIGNS AND SYMPTOMS OF EXPOSURE: None Known, See HEALTH HAZARDS

N/A

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None Known

N/A

EMERGENCY AND FIRST AID PROCEDURES: As with any Chemical, Use Caution and Good Safety Measures when in use. Ingestion: Drink Plenty of Water/2-3 Glasses

and Consult Physician Immediately. Eyes: Flush with Plenty of Water for 15 minutes. Skin: Wash Thoroughly with Soap and Water. Inhalation: None Known

## SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to Be Taken in Case Material is Released or Spilled Spilled Material should be washed away promptly with copious amounts of water.

Product Material instantly Neutralizes with water.

N/A

Waste Disposal Method Non Hazardous. No Special Requirements are known to be applicable. Product instantly neutralized with water.

Always offer Drums and/or Bulk Containers to be returned to your Supplier or for Recycling to your local Recycler.

Precautions to Be Taken in Handling and Storing None Known. As with all Chemical Products and Materials, take care as to where and how you store them.

N/A

Other Precautions None Known

N/A

N/A

## SECTION 8 - Control Measures

Respiratory Protection (*Specify Type*) N/A

Ventilation No Special Ventilation is Known to be Needed.

Local Exhaust N/A

Special N/A

Other N/A

Mechanical(*General*) N/A

Protective Gloves N/A

Eye Protection As with any Chemical Product or Material, care should be taken as not to get anything in the Eyes. Safety Glasses or Goggles are suggested for use

Other Protective Clothing or Equipment N/A

N/A

Work/Hygienic Practices N/A

N/A