



To: All Dealers, Distributors, and Customers  
From: Harry Farkhan, Executive Vice President  
Subject: Ride-On Tire Protection System Environmental Analysis

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The following bulletin is in response to questions regarding the Environmental Analysis of the Ride-On Tire Protection System (TPS). Please share this information with your customers and employees.

The environmental consulting firm of Gabbay & Hart has completed the environmental impact analysis and review of the Ride-On Tire Protection System tire sealant (Ride-On). Ride-On contains ethylene glycol (EG), an organic chemical compound commonly used in automotive antifreeze. The purpose of this review was to analyze the disposal requirements and environmental impacts, if any, of Ride-On.

A sample of Ride-On was submitted to a California State certified laboratory on April 5, 2004 for a **Department of Health Services (DOHS) Bioassay – DOHS 1 Title 22 for Hazardous Waste (LC-50) Using Fathead Minnows**. Based on the successful passing of this test, Ride-On, does not exhibit the California hazardous waste characteristic of aquatic toxicity. However, Inovex recommends that Ride-On be washed out of tires, and the resulting diluted non-hazardous effluent solution be disposed of only in wastewater drains. Also, please consult with your local wastewater treatment facility for additional instructions.

#### **Ride-On (TPS) is Environmentally-Friendly – Not Antifreeze**

Ride-On (TPS) contains Ethylene Glycol (EG), an organic chemical compound commonly used in automotive antifreeze and in cooling and heating systems. Ride-On does NOT however use recycled EG containing the corrosion inhibitors and stabilizing packages required for engine and coolant systems. Ride-On TPS tire sealants **do not** have the hazardous environmental problems associated with waste antifreeze. Further:

1. Ride-On (TPS) is **inert** in tires and does not come in contact with engine components that contain heavy metals. Therefore, it does not pick up hazardous heavy metals.
2. Ride-On (TPS) contains only **organic** corrosion inhibitors that are consumed during the normal useful life of the sealant.
3. Ride-On (TPS) has been **buffered** so that even in used form the product pH remains above 7.00 and does not become acidic.

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4. Ride-On (TPS) contains only about 46% EG by weight and is **diluted** by at least 50% water.
5. Ride-On has been determined through independent testing to possess a flashpoint of 594 ° F, and thus can be said to be virtually non-flammable.

### **Instructions for Use & Proper Disposal of Ride-On (TPS):**

#### Use

The normal dosage for a commercial truck tire (11R22.5) is 40 fluid ounces of product (of which only 19.2 fluid ounces is EG).

#### Disposal -

Inovex Industries recommends that the product be washed out with water and the resulting diluted wash liquid be vacuumed out. Ride-On TPS is more than 95% water soluble with the remaining 5% being inert man-made fibers that are easily water dispersible. Below is an example of concentration of EG when an average sized commercial truck tire (11R-22.5) is washed out with **only** two gallons of water:

Quantity of Ride-On in an Average Fleet Tire (11R-22.5)	40 oz.
Percent of Ethylene Glycol (48%)	19 oz.
Washout with a minimum 2 gallons of Water	256 oz.
Final diluted effluent mixture	296 oz.
Percent EG in final effluent (19 oz./296 oz.)	6.4%

(This value, 6.4%, may be utilized by producers of Ride-On containing wastes as a partial basis for a non-hazardous waste determination in California.)

When washed out it is recommended that the non-hazardous effluent be disposed of in a sanitary waste water system resulting in considerable dilution prior to entering a wastewater treatment plant. Again, through independent testing and taking into effect the differences for municipal treatment plants, this diluted waste mixture will not adversely impact a wastewater treatment facility.

***Please dispose in accordance with all applicable local, state, and federal regulations. Check with your local Water/Sewer Authority. Inovex does NOT recommend that the effluent be disposed of in storm water drain systems.***

#### **INOVEX INDUSTRIES, INC.**

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Member: Tire Industry Association • Tire Retread Information Bureau • American Trucking Association



### Environmental Benefits of Ride-On (TPS):

Every time customers use Ride-On (TPS) in their tires, they are helping the environment. Ride-On (TPS) helps protect the environment by reducing tire waste and saving scarce landfill space, reducing usage of scarce natural resources, reducing fossil fuel emissions that contribute to air pollution and global warming, and by reducing pollution associated with tire manufacturing.

- Every year, approximately 260 million tires are scrapped filling up precious landfill space. Each tire takes approximately 500 years to biodegrade. Scrap tires pose significant risk of fires, and create a breeding ground for mosquitoes and other vermin.
- By improving the pressure retention and helping balance tires, Ride-On prolongs tire life up to 25%, possibly more.
- It takes an average of 22 gallons of oil to manufacture one truck tire. By prolonging tire life, using Ride-on reduces our reliance on oil needed to manufacture tires and helps reduce pollution associated with the manufacturing process.
- By increasing tire pressure retention, Ride-On helps increase the fuel economy of fleets and reduces rolling resistance of tires. Ride-On has demonstrated improvements in fuel efficiency of **1%-2%** in highway-use equipment. For example, a tractor trailer that travels 100,000 miles per year will use about 14,000 gallons of diesel fuel. A 1-2% savings of diesel fuel as a result of Ride-On equals approximately 140–280 gallons of diesel fuel savings per year. That is a reduction in diesel fuel usage of 140,000 to 280,000 gallons for a fleet of just 1000 vehicles.

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### Health & Safety Precautions:

As always, when working in a shop environment, good industrial hygiene practices such as, proper ventilation and the wearing of safety glasses and protective gloves should be employed.

#### **Potential Health Effects**

##### Eye

Exposure may cause mild eye irritation. Symptoms may include stinging, tearing, redness, and swelling.

##### Skin

Harmful effects are not expected from this route of exposure under normal conditions of handling and use.

##### Swallowing

Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects; swallowing large amounts can be harmful.

##### Inhalation

Harmful effects are not expected from this route of exposure under normal conditions of handling and use.

Please refer to the Material Safety Data Sheet for more details or call 1-800-255-3924.

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# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

## ANALYTICAL RESULTS

### Ordered By

Inovex Industries, Inc.  
 45681 Oakbrook Court  
 Unit 102  
 Sterling, VA 20166

Telephone: (703)421-9778

Attn: Hormoz Farkhan

Page: 2

Project ID: LC-50 TEST

Project Name: Ride-On TPS CHS

AETL Job Number	Submitted	Client
28532	04/05/2004	INOVEX

### Method: BIOASSAY-1, DOHS (Title 22) Hazardous Waste Using Fathead Minnows

Our Lab I.D.		Method Blank	28532.01			
Client Sample I.D.			Ride-On Batch 1076			
Date Sampled			/ /			
Date Prepared		04/06/2004	04/06/2004			
Preparation Method		BIOASSAY	BIOASSAY			
Date Analyzed		04/10/2004	04/10/2004			
Matrix		Sludge	Sludge			
Units		Percent	Percent			
Dilution Factor		1	1			
<b>Analytes</b>	<b>MDL</b>	<b>PQL</b>	<b>Results</b>	<b>Results</b>		
Percent survival	1.0	1.0	ND	100		



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## SUMMARY OF RESULTS

**CLIENT NAME:** Inovex Industries, Inc.  
45681 Oakbrook Court Unit 102  
Sterling, VA 20166

**JOB NUMBER:** 28532

**PROJECT NAME:** Ride-On TPS CHS

**SITE:** ----

**ANALYSIS:** Bioassay for Hazardous Waste (Title 22)

**DATE SAMPLED:** ----

**DATE SUBMITTED:** 04-05-04

**DATE ANALYSIS COMPLETED:** 04-14-04

**SAMPLE ID NO.:** Ride-On Batch 1076

**LAB ID NO.:** 28532.01

### WATER QUALITY

DILUTION WATER: Reconst. Fresh		AERATION: Single Bubble Air	
CONTROL HARDNESS		CONTROL ALKALINITY	
Beg: 45 mg/L	End: 56 mg/L	Beg: 32 mg/L	End: 38 mg/L
SAMPLE HARDNESS		SAMPLE ALKALINITY	
Beg: 44 mg/L	End: 47 mg/L	Beg: 34 mg/L	End: 39 mg/L

### ORGANISM INFORMATION

SPECIES:	Pimephales promelas	DATE REC'D:	02/26/04
COMMON NAME	Fathead Minnow	AVERAGE LNTH:	38 mm
SOURCE:	Thomas Fish Co.	AVERAGE WT:	0.76 gm
CARRIER:	California Overnight	NO. FISH/TANK:	10

### TEST DATA

	Initial		24 Hours				48 Hours				72 Hours				96 Hours				
DATE:	04/06/04		04/07/04				04/08/04				04/09/04				04/10/04				
TIME:	1600		1630				1530				1500				1400				
CONC.	Dis. Oxy.	Temp dg.C	pH	Dis. Oxy.	Temp dg.C	pH	#Fish Dead	Dis. Oxy.	Temp dg.C	pH	#Fish Dead	Dis. Oxy.	Temp dg.C	pH	#Fish Dead	Dis. Oxy.	Temp dg.C	pH	#Fish Dead
0 (Con.)	9.1	19.3	7.4	8.2	19.0	7.3	0	7.5	19.3	7.1	0	7.4	19.3	7.2	0	7.4	19.4	8.1	0
400 mg/L	9.1	19.1	7.8	8.2	18.9	7.2	0	8.1	19.0	7.1	0	7.1	19.0	6.9	0	7.0	18.9	7.5	0
400 mg/L	9.1	19.1	7.8	8.3	18.8	7.2	0	8.0	18.9	7.1	0	7.1	19.1	7.0	0	7.0	19.0	7.5	0
750 mg/L	9.1	19.2	8.0	8.1	18.8	7.2	0	7.5	19.0	7.1	0	6.9	19.1	7.0	0	6.7	19.1	7.6	0
750 mg/L	9.1	19.1	8.0	8.2	18.9	7.2	0	7.4	19.1	7.1	0	6.6	19.2	7.1	0	6.7	19.2	7.6	0

### FINAL DATA

TOTAL MORTALITIES	
0 (Con.)	0
400 mg/L	0
400 mg/L	0
750 mg/L	0
750 mg/L	0

### FINAL RESULTS

96 HOUR LC50=	>750 mg/L
STATUS=	Pass
CALCULATION METHOD=	Binomial Test

Performed by: ABC Laboratories

Cyrus Razmara, Ph.D.  
Laboratory Director