SPECTRASCAN®

MATERIAL SAFETY DATA SHEET

according to EC Directive 2001/58/EC

SS-1144; SS-1244; SS-1544

Revision Number 2, Revision Date December 04, 2007

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product code SS-1144 P

Product name
Common Name
Phosphorus in Water
Manufacturer, importer, supplier
Inorganic Ventures, Inc.
195 Lehigh Avenue, Suite 4

195 Lehigh Avenue, Suite 4 Lakewood, NJ 08701

Web: www.inorganicventures.com

Emergency telephone number 800-424-9300 CHEMTREC (24 hrs)

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% Weight	ACGIH*	OSHA*
7732-18-5	Water	~95-99.9	N/A	N/A
7664-38-2	Phosphoric acid	~0.1-1	1 mg/m3 TWA	1 mg/m3 TWA

^{*} ACGIH - Occupational Exposure Limits - TWAs

3. HAZARDS IDENTIFICATION

Emergency Overview		
		Final product is not regulated

Inhalation

Eye contact	Contact with eyes may cause irritation
Ingestion	Harmful if swallowed
Skin contact	Substance may cause slight skin irritation

· May cause irritation of respiratory tract

4. FIRST AID MEASURES

General advice	Show this safety data sheet to the doctor in attendance
Skin contact	 Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes
Eye contact	 Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes
	Keep eye wide open while rinsing
	 If eye irritation persists, consult a specialist
Inhalation	Move to fresh air
Ingestion	If conscious, drink plenty of water
	Consult a physician

5. FIRE-FIGHTING MEASURES

Flash point	NA	
Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment	
Specific hazards • None		
Specific methods	 Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations 	
Special protective equipment for firefighters	 As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear 	

^{*} OSHA - Final PELs - Time Weighted Averages (TWAs)

6. ACCIDENTAL RELEASE MEASURES		
Personal precautions	Ensure adequate ventilation	
Environmental precautions	Prevent further leakage or spillage if safe to do so	
-	Prevent product from entering drains	
Methods for cleaning up	Dam up	
	Pick up and transfer to properly labelled containers	
	Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container	
	After cleaning, flush away traces with water	

7. HANDLING AND STORAGE

Handling

Technical	Use only in area provided with appropriate exhaust ventilation		
measures/Precautions			
Safe handling advice	Wear personal protective equipment		

Storage

Technical	Keep in properly labelled containers	
measures/Precautions	Store at room temperature in the original container	
	 Keep containers tightly closed in a dry, cool and well-ventilated place 	
Incompatible products	No information available	

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment			
Hand protection	impervious gloves		
Eye protection	tightly fitting safety goggles		
Respiratory protection	Ensure adequate ventilation		
Skin and body protection • Chemical resistant apron			
	Lab coat		
Hygiene measures	When using, do not eat, drink or smoke		
	Regular cleaning of equipment, work area and clothing		

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form liquid.
Appearance clear
Colour None.
Odour None.

Important Health Safety and Environmental Information

pH 0 to 2
Boiling point/range 100°C
Flash point N/A
Vapour pressure NA.
Water solubility miscible.

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions	
	Hazardous polymerisation does not occur	
Materials to avoid	No information available	
Hazardous decomposition	No information available	
products		

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information

CAS	Chemical Name	% Weight	LD50/oral/rat =	LD50/dermal/rat =
7732-18-5	Water	99.7	N/A	N/A
7664-38-2	Phosphoric acid	0.3	mg/m3/1H; Oral LD50 Rat:	Inhalation LC50 Rat: >850 mg/m3/1H; Oral LD50 Rat: 1530 mg/kg; Dermal LD50 Rabbit: 2740 mg/kg

Product Information

Local effects	Poison	
Eye irritation	May cause eye irritation with susceptible persons.	
Skin irritation May cause skin irritation and/or dermatitis.		
Inhalation	May cause irritation of respiratory tract.	
Ingestion	Harmful if swallowed.	

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Component Information

CAS	Chemical Name	% Weight	EFAD*	EFFSD*	EMD - Ecotoxicity*
7732-18-5	Water	~95-99.9	N/A	N/A	N/A
7664-38-2	Phosphoric acid	~0.1-1	N/A	96 Hr LC50 mosquito fish: 138 mg/L	N/A

^{*} EFAD - Ecotoxicity - Freshwater Algae Data

Product Information

Do not allow material to contaminate ground water or sewage system

Other information

13. DISPOSAL CONSIDERATIONS				
Waste from residues / unused	 In accordance with local and national regulations 			

products

Contaminated packaging

• Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

DOT Final product is not regulated

IATA-DGR Final product is not regulated

15. REGULATORY INFORMATION

U.S. INVENTORIES:

CAS	Chemical Name	% Weight	CPCL*	NJRTK*	CERCLA/SARA*
7732-18-5	Water	~95-99.9	N/A	N/A	N/A
7664-38-2	Phosphoric acid	~0.1-1	N/A	sn 1516	5000 lb final RQ; 2270 kg final RQ

^{*} CPCL - California - Proposition 65 - Carcinogens List

^{*} EFFSD - Ecotoxicity - Freshwater Fish Species Data

^{*} EMD - Ecotoxicity - Microtox Data

^{*} NJRTK - New Jersey - Department of Health RTK List

^{*} CERCLA/SARA - Hazardous Substances and their Reportable Quantities

INTERNATIONAL INVENTORIES:

CAS	Chemical Name	% Weight	WHMIS*	EINECCS - European Union*
7732-18-5	Water	~95-99.9	Uncontrolled product according to WHMIS classification criteria	231-791-2
7664-38-2	Phosphoric acid	~0.1-1	Е	231-633-2

^{*} WHMIS - Canada - WHMIS - Classifications of Substances

16. OTHER INFORMATION

The above information is believed to be accurate and represents the best information available to us. It has been compiled from the data presented in various technical publications and our experience and should only be used as a guide for handling this product. It is the user's responsibility to determine the suitability of this information for their particular purposes. We assume that only qualified individuals, trained and familiar with procedures suitable to this product will handle this material. Inorganic Ventures, Inc. assumes no responsibility and shall not be held liable for any damage resulting from misuse of this product.

^{*} EINECCS - European Union - European inventory of Existing Commercial Chemical Substances (EINECCS)