

# Safety Data Sheet

Issue Date: 23-Oct-2014

Revision Date: 16-Mar-2017

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Take Off Magnum

### Other means of identification

**SDS #** VLS-058-CA

**Product Code** FFN: 01206  
**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Nutrient

**Uses Advised Against** No information available

### Details of the supplier of the safety data sheet

#### Initial Supplier Identifier

Verdesian Life Sciences, U.S., LLC.  
1001 Winstead Drive, Suite 480  
Cary, NC 27513

#### Emergency Telephone Number

**Initial supplier phone number** Business Phone: (800) 868-6446 Fax: (919) 535-3652  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Clear liquid                      **Physical state** Liquid

### Classification

Acute toxicity - Oral	Category 4
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### Label Elements

#### Signal word

Warning

#### Hazard statements

Harmful if swallowed



**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product

**Precautionary Statements - Response**

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
Rinse mouth

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Information**

**Unknown acute toxicity** 78.55 % of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Mixture**

Chemical Name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Phosphorous acid	13598-36-2	33.9	-	-
Potassium hydroxide	1310-58-3	21.15	-	-
Citric Acid	77-92-9	2.5	-	-
Glycerol	56-81-5	1	-	-

### 4. FIRST AID MEASURES

**First Aid Measures**

<b>General advice</b>	Provide this SDS to medical personnel for treatment.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
<b>Skin contact</b>	Wash off immediately with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation persists, call a doctor.
<b>Inhalation</b>	Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician/poison center if individual's condition declines or if symptoms persist.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Call a doctor immediately.

**Most important symptoms and effects**

**Symptoms** May cause eye, skin and respiratory tract irritation. Will cause gastrointestinal tract irritation.

**Indication of any immediate medical attention and special treatment needed**

**Note to doctors** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable extinguishing media</b>	Not determined.

**Specific hazards arising from the chemical** Product is not flammable.

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Special protective equipment for fire-fighters** 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** Wear protective clothing as described in Section 8 of this safety data sheet. Ventilate area of leak or spill.

### Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an absorbent material.

**Methods for cleaning up** Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste disposal, see section 13 of the SDS.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Strong oxidising agents, strong acids, and strong bases

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Limits

Chemical Name	Canada - Alberta - Occupational Exposure Limits - Ceilings	Canada - British Columbia - Occupational Exposure Limits - Ceilings	Canada - Ontario - Occupational Exposure Limits - Ceilings	Quebec
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	CEV: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Glycerol 56-81-5	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>		TWA: 10 mg/m <sup>3</sup>

### Appropriate engineering controls

**Engineering controls** Apply technical measures to comply with the occupational exposure limits.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear eye/face protection.

**Skin and body protection** Wear suitable protective clothing.

**Respiratory protection** Ensure adequate ventilation, especially in confined areas.

**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

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear liquid
<b>Colour</b>	Clear
<b>Odour</b>	No information available
<b>Odour Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	5.5-5.8	
<b>Melting Point/Freezing Point</b>	Not determined	
<b>Boiling Point/Boiling Range</b>	Not determined	
<b>Flash Point</b>	No data available	
<b>Evaporation Rate</b>	Not determined	
<b>Flammability (Solid, Gas)</b>	n/a-liquid	
<b>Flammability Limits in Air</b>		
<b>Upper Flammability Limits</b>	Not determined	
<b>Lower Flammability Limit</b>	Not determined	
<b>Vapour Pressure</b>	Not determined	
<b>Vapour Density</b>	Not determined	
<b>Relative Density</b>	1.46-1.48	
<b>Water Solubility</b>	Not determined	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Auto-ignition Temperature</b>	Not determined	
<b>Decomposition Temperature</b>	Not determined	
<b>Kinematic Viscosity</b>	Not determined	
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive properties</b>	No information available.	

**Oxidising properties** No information available.

**Other Information**

**Softening Point** No information available  
**Molecular weight** No information available  
**VOC Content (%)** No information available  
**Density** 12.34 lbs.gal  
**Bulk Density** No information available

## 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.  
**Conditions to Avoid** Heat, flames and sparks.  
**Incompatible Materials** Strong oxidising agents, strong acids, and strong bases.  
**Hazardous Decomposition Products** None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information**

**Eye contact** Direct contact with eyes may cause temporary irritation.  
**Skin contact** May cause temporary irritation on skin contact.  
**Inhalation** May cause irritation if inhaled.  
**Ingestion** Harmful if swallowed.

**Information on physical, chemical and toxicological effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Numerical measures of toxicity**

**Acute Toxicity**

**Unknown acute toxicity** 78.55 % of the mixture consists of ingredient(s) of unknown toxicity

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Phosphorous acid 13598-36-2	= 1895 mg/kg ( Rat )	-	-
Potassium hydroxide 1310-58-3	= 284 mg/kg ( Rat )	-	-
Citric Acid 77-92-9	= 3 g/kg ( Rat ) = 3000 mg/kg ( Rat )	-	-
Glycerol 56-81-5	= 12600 mg/kg ( Rat )	> 10 g/kg ( Rabbit )	> 570 mg/m <sup>3</sup> ( Rat ) 1 h

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**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
Phosphorous acid 13598-36-2	-	6980 - 9784: 96 h Brachydanio rerio mg/L LC50 static	-	-
Potassium hydroxide 1310-58-3	-	80: 96 h Gambusia affinis mg/L LC50 static	-	-
Citric Acid 77-92-9	-	1516: 96 h Lepomis macrochirus mg/L LC50 static	-	120: 72 h Daphnia magna mg/L EC50
Glycerol 56-81-5	-	51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static	-	500: 24 h Daphnia magna mg/L EC50

**Persistence/Degradability** No information available.

**Bioaccumulation** No information available.

**Mobility** .

Chemical Name	Partition Coefficient
Potassium hydroxide 1310-58-3	0.65 0.83
Citric Acid 77-92-9	-1.72
Glycerol 56-81-5	-1.76

**Other Adverse Effects** No information available.

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods**

**Waste from residues/unused products** 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

**Note** The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation

**DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

## 15. REGULATORY INFORMATION

### REGULATORY INFORMATION

#### International Regulations

**Ozone-depleting substances (ODS)** Not applicable

**Persistent Organic Pollutants** Not applicable

**Export Notification requirements** Not applicable

#### International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Phosphorous acid	X	X	X	Present	X	Present	X	X
Potassium hydroxide	X	X	X	Present	X	Present	X	X
Citric Acid	X	X	X	Present	X	Present	X	X
Glycerol	X	X	X	Present	X	Present	X	X

#### **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

**AICS** - Australian Inventory of Chemical Substances

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<u>NFPA</u>	<b>Health Hazards</b> Not determined	Not	<b>Flammability</b> Not determined	Not	<b>Instability</b> Not determined	Not	<b>Special Hazards</b> Not determined
<u>HMIS</u>	<b>Health Hazards</b> determined	Not	<b>Flammability</b> determined	Not	<b>Physical hazards</b> determined	Not	<b>Personal Protection</b> Not determined

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value
*	Skin designation
<b>Issue Date:</b>	23-Oct-2014

Revision Date: 16-Mar-2017

Revision Note: New product.

**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**