



# Safety Data Sheet

Issuing Date 17-Jul-2015

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Revision Number 2

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

### Product identifier

Product Name BIOACT® 105

### Other means of identification

Product Code PC105  
UN-No UN3295

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

Recommended Use Technical cleaning solvent.  
Uses advised against FOR INDUSTRIAL USE ONLY

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

Manufacturer Address Vantage Specialties, Inc.  
3938 Porett Drive  
Gurnee, IL 60031 USA  
847-244-3410

### Emergency Telephone Number

Company Phone Number +1-847-244-3410  
Emergency Telephone Number CHEMTREC International +1-703-527-3887  
CHEMTREC USA: 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 1
Flammable Liquid and vapor	Category 3

### Label Elements

### EMERGENCY OVERVIEW

#### DANGER

#### Hazard statements

May be fatal if swallowed and enters airways  
Causes skin irritation  
Causes serious eye irritation  
May cause drowsiness or dizziness  
May cause an allergic skin reaction  
Very toxic to aquatic life with long lasting effects  
Flammable liquid and vapor





**Color** Colorless

**Physical State** Liquid

**Odor** Characteristic

**Precautionary Statements - Prevention**

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Use only in a well ventilated area

Wear eye/face protection

Wear protective gloves

Avoid breathing vapors or mists

Take precautionary measures against static discharge

Avoid release to the environment

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

IF ON SKIN: Rinse exposed skin with plenty of water. If skin irritation occurs: get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Get medical advice/attention if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting

IN CASE OF FIRE: Use CO2, dry chemical, ABC fire extinguisher, or foam for extinction

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with applicable regulations.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No.	Weight %
Isoparaffinic Hydrocarbon	64742-48-9	30 - 60
Propylene glycol propyl ether	1569-01-3	30 - 60
D-Limonene	5989-27-5	10 - 30

**4. FIRST AID MEASURES**

**FIRST AID MEASURES**

**Eye contact**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, call a physician.

**Skin contact**

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention.

**Inhalation**

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

**Ingestion**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. DO NOT induce vomiting.

**Protection of First-aiders**

Use personal protective equipment.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**

Irritation or pain in contact with skin or eyes. Skin irritation, allergic reaction.

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

**Notes to Physician**

Treat symptomatically.



## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Dry chemical. Foam. Carbon dioxide. Water. Class ABC/BC fire extinguisher.

### Unsuitable extinguishing media

None identified.

### Specific hazards arising from the chemical

Discarded towels or wipes soaked with solvent may smolder if not properly contained.

### Hazardous combustion products

Carbon oxides.

### Explosion Data

#### Sensitivity to Mechanical Impact

None.

#### Sensitivity to Static Discharge

Yes.

### 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. Remove all sources of ignition. Ensure adequate ventilation. Avoid contact with skin, eyes, and clothing.

#### For emergency responders

Use personal protection recommended in Section 8.

### Environmental precautions

#### Environmental precautions

Prevent release to surface water.

### Methods and material for containment and cleaning up

#### Methods for Containment

Dike to collect large liquid spills. Avoid release to the environment.

#### Methods for Cleaning Up

Absorb with inert material and transfer to containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### Handling

Wear personal protective equipment. Avoid contact with skin, eyes, and clothing. Do not breathe vapors or spray mist. Take precautionary measures against static discharges.

### Conditions for safe storage, including any incompatibilities

#### Storage

Keep away from open flames, hot surfaces and sources of ignition.

#### Incompatible materials

Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Manufacturer recommended exposure limit (8-hour TWA) for CAS 64742-48-9: 171 ppm, 1200 mg/m<sup>3</sup>.

### Appropriate engineering controls



<b>Engineering Measures</b>	Safety Shower Eyewash station Ventilation system.
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**Individual protection measures, such as personal protective equipment**

<b>Eye/face Protection</b>	Safety glasses with side-shields.
<b>Skin and Body Protection</b>	Long sleeved clothing.
<b>Respiratory Protection</b>	In case of inadequate ventilation wear respiratory protection.

<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.
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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	Characteristic
<b>Appearance</b>	Clear	<b>Odor threshold</b>	Not determined
<b>Color</b>	Colorless		
<b>Property</b>	<b>Values</b>	<b>Remarks</b>	<b>Method</b>
pH		Not Applicable	
Melting point/freezing point		Not determined	
Boiling point/boiling range	> 150 °C / > 300 °F		
Flash Point	41 °C / 105 °F	Closed cup	
Evaporation Rate		Not determined	
Flammability (solid, gas)		Flammable liquid and vapor	
Flammability Limits in Air		Published data for d-Limonene	
Upper flammability limits	6.1%		
Lower Flammability Limit	0.7%		
Vapor pressure	1.5	mm Hg	
Vapor Density	>1	(air = 1)	
Specific Gravity	0.8		
Water Solubility	Partially soluble		
Solubility in other solvents		Not determined	
Partition coefficient		Not Applicable	
Autoignition Temperature		Not determined	
Decomposition temperature		Not determined	
Kinematic viscosity	1.6 cSt	@ 25 °C	
Dynamic viscosity		Not determined	
Explosive Properties	None		
Oxidizing Properties	None		

**Other Information**

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	Not reactive
<b>Remarks</b>	
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of Hazardous Reactions</b>	
Hazardous Reactions	None under normal processing.
Hazardous Polymerization	Hazardous polymerization does not occur.
<b>Conditions to Avoid</b>	Keep away from open flames, hot surfaces and sources of ignition.
<b>Incompatible materials</b>	Strong oxidizing agents.

### Hazardous Decomposition Products

None identified.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

Inhalation	May cause drowsiness and dizziness.
Eye contact	Irritating to eyes.
Skin contact	Irritating to skin. May cause sensitization by skin contact.
Ingestion	Potential for aspiration if swallowed.

#### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isoparaffinic Hydrocarbon 64742-48-9	> 5000 mg/kg ( Rat )	> 3160 mg/kg ( Rabbit )	-
Propylene glycol propyl ether 1569-01-3	= 2490 mg/kg ( Rat ) = 2504 mg/kg ( Rat )	= 3550 mg/kg ( Rabbit )	-
D-Limonene 5989-27-5	= 4400 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	-

### Information on toxicological effects

**Symptoms** Swelling/redness in contact with skin or eyes.

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

**Skin corrosion/irritation** Irritating to skin.  
**Serious eye damage/eye irritation** Irritating to eyes.  
**Sensitization** Repeated or prolonged contact may cause allergic reactions in very susceptible persons.  
**Mutagenic Effects** No known hazard.  
**Carcinogenicity** Contains no listed human carcinogens at greater than 0.1%.

**Reproductive Toxicity** No known hazard.

**Developmental Toxicity** No known hazard.  
**Teratogenic** No known hazard.  
**STOT - single exposure** Inhalation of vapors may cause dizziness and drowsiness.

**STOT - repeated exposure** No known hazard.  
**Aspiration hazard** May be fatal if swallowed and enters airways.

**Numerical measures of toxicity-Product Information** Not determined

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Very toxic to aquatic life

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Isoparaffinic Hydrocarbon 64742-48-9		LC50= 2200 mg/L Pimephales promelas 96 h		
D-Limonene 5989-27-5		LC50 (96h) 0.62 - 0.8 mg/L Pimephales promelas		LC50 (48h): 0.58 - 0.92 mg/l Daphnia magna

### Persistence and degradability



No data available.

**Bioaccumulation/Accumulation**

d-Limonene BCF: 683

**Mobility**

Expected to partition to air.

**Other Adverse Effects**

None identified

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste Disposal Method** Dispose of in accordance with applicable regulations.

**Contaminated Packaging** Dispose of in accordance with applicable regulations.

**US EPA Waste Number** D001

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
D-Limonene 5989-27-5	Toxic

**14. TRANSPORT INFORMATION**

**DOT**

**UN-No** UN3295  
**Proper Shipping Name** Hydrocarbons, Liquid, N.O.S.  
**Hazard Class** 3  
**Packing Group** III  
**Special Provisions** Exempt from regulation by US DOT when shipped solely by land in containers less than 119 gallons.

**TDG**

**UN-No** UN3295  
**Proper Shipping Name** Hydrocarbons, Liquid, N.O.S.  
**Hazard Class** 3  
**Packing Group** III

**IATA**

**UN-No** UN3295  
**Proper Shipping Name** Hydrocarbons, Liquid, N.O.S.  
**Hazard Class** 3  
**Packing Group** III

**IMDG / IMO**

**UN-No** UN3295  
**Proper Shipping Name** Hydrocarbons, Liquid, N.O.S.  
**Hazard Class** 3  
**Packing Group** III  
**Marine Pollutant** Yes  
**Description** d-Limonene

## 15. REGULATORY INFORMATION

### International Inventories

TSCA	Complies
DSL	Complies
EINECS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

### 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 Commercial Chemical Substances/EU 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

### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

#### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### U.S. State Regulations

#### U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

## 16. OTHER INFORMATION

<b>NFPA</b>	Health Hazard 1	Flammability 2	Instability 0	Physical and Chemical Hazards n/a
<b>HMIS</b>	Health Hazard 1	Flammability 2	Physical hazards 0	Personal Precautions B

Prepared by	Product Steward
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Revision Note	
Reason for Revision	Update to supplier identity/logo Update to ingestion hazard response.
Disclaimer	



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End of MSDS

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