

<b>ASHLAND</b>		Page: 1
<b>SAFETY DATA SHEET</b>		Revision Date: 03/15/2016
		Print Date: 4/13/2016
		SDS Number: 000000266509
Vincience / PhytoRNx Baobab™ biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 874556		Version: 1.2

29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : Vincience / PhytoRNx Baobab™  
biofunctional  
™ Trademark, Ashland or its subsidiaries, registered in  
various countries

### Relevant identified uses of the substance or mixture and uses advised against

Use of the : biofunctional  
substance/mixture

<b>Details of the supplier of the safety data sheet</b> Ashland P.O. Box 2219 Columbus, OH 43216 United States of America  EHS Customer Requests@ashland.com	<b>Emergency telephone number</b> 1-800-ASHLAND (1-800-274-5263)  <b>Regulatory Information Number</b> 1-800-325-3751  <b>Product Information</b> 614-790-3333
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## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### GHS label elements

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

Precautionary Statements : **Prevention:**  
Wear respiratory protection.

### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Hazardous components

Chemical name	CAS-No.	Classification	Concentration (%)
GLYCERIN	56-81-5	Not a hazardous substance or mixture.	35.00
2-PHENOXYETHANOL	122-99-6	Acute Tox. 4; H302 Eye Irrit. 2A; H319	1.55

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#### SECTION 4. FIRST AID MEASURES

General advice	: No hazards which require special first aid measures.
If inhaled	: If breathed in, move person into fresh air. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
In case of eye contact	: Remove contact lenses. Protect unharmed eye.
If swallowed	: Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	: Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways) pain in the abdomen and lower back acute kidney failure (sudden slowing or stopping of urine production)
Notes to physician	: No hazards which require special first aid measures.

#### SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray Foam Carbon dioxide (CO2) Dry chemical
Specific hazards during firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: Aldehydes carbon dioxide and carbon monoxide

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nitrogen oxides (NOx)

Specific extinguishing  
methods :

Product is compatible with standard fire-fighting agents.

Further information : Standard procedure for chemical fires.

Special protective equipment  
for firefighters : In the event of fire, wear self-contained breathing apparatus.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions,  
protective equipment and  
emergency procedures : Persons not wearing protective equipment should be excluded  
from area of spill until clean-up has been completed.

Environmental precautions : Prevent further leakage or spillage if safe to do so.

Methods and materials for  
containment and cleaning up : Keep in suitable, closed containers for disposal.

Other information : Comply with all applicable federal, state, and local regulations.

## SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Smoking, eating and drinking should be prohibited in the  
application area.  
For personal protection see section 8.

Materials to avoid : No materials to be especially mentioned.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
GLYCERIN	56-81-5			NIOSH/GUID E
		PEL	15 mg/m3 Total dust.	OSHA_TRA NS
		PEL	5 mg/m3 Respirable fraction.	OSHA_TRA NS

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				OSHA_TRANS
				OSHA_TRANS

Hazardous components without workplace control parameters

**Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

**Personal protective equipment**

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection : Wear as appropriate:  
Safety shoes  
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : General industrial hygiene practice.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state : liquid

Colour : amber

Odour : characteristic

Odour Threshold : No data available

pH : 5.5 - 6.5

Melting point/freezing point : No data available

Boiling point/boiling range : 212 °F / 100 °C  
(1,013.33 hPa)  
Calculated Phase Transition Liquid/Gas

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : No data available

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Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Density : No data available

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Oxidizing properties : No data available

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Conditions to avoid : excessive heat  
Do not allow evaporation to dryness.

Incompatible materials : Strong bases  
Strong oxidizing agents

Hazardous decomposition products  
acrolein  
Aldehydes  
carbon dioxide and carbon monoxide

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## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
Skin contact  
Eye Contact  
Ingestion

### Acute toxicity

Not classified based on available information.

#### Components:

##### GLYCERIN:

Acute oral toxicity : LD 50 (Rat): 12,600 mg/kg  
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC 50 (Rat): > 570 mg/m3  
Exposure time: 1 h  
Assessment: Not classified as acutely toxic by inhalation under GHS.

Acute dermal toxicity : LD 50 (Rabbit): > 10 g/kg

##### 2-PHENOXYETHANOL:

Acute oral toxicity : LD 50 (Rat): 1,850 mg/kg  
Method: OECD Test Guideline 401

Acute inhalation toxicity : Assessment: No adverse effect has been observed in acute inhalation toxicity tests.

### Skin corrosion/irritation

Not classified based on available information.

#### Components:

##### GLYCERIN:

Result: No skin irritation

##### 2-PHENOXYETHANOL:

Species: Rabbit

Result: No skin irritation

### Serious eye damage/eye irritation

Not classified based on available information.

#### Product:

Remarks: Unlikely to cause eye irritation or injury.

#### Components:

##### GLYCERIN:

Result: Mildly irritating to eyes

##### 2-PHENOXYETHANOL:

Species: Rabbit

Result: Irritating to eyes.

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#### Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

#### Components:

2-PHENOXYETHANOL:

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

Method: OECD Test Guideline 406

Germ cell mutagenicity

Not classified based on available information.

#### Components:

2-PHENOXYETHANOL:

Genotoxicity in vitro

: Test Type: Ames test

Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Result: negative

#### Carcinogenicity

Not classified based on available information.

#### Reproductive toxicity

Not classified based on available information.

#### STOT - single exposure

Not classified based on available information.

#### STOT - repeated exposure

Not classified based on available information.

#### Aspiration toxicity

Not classified based on available information.

#### Further information

#### Product:

Remarks: No data available

#### Carcinogenicity:

##### IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

##### OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

##### NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

## SECTION 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

#### Product:

Ecotoxicology Assessment

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Acute aquatic toxicity : Not classified based on available information.

Chronic aquatic toxicity : Not classified based on available information.

**Components:**

**GLYCERIN:**

Toxicity to fish : LC 50 (Goldfish (Carassius auratus)): > 5,000 mg/l  
Exposure time: 24 h  
Method: Static  
Remarks: Mortality

Toxicity to daphnia and other aquatic invertebrates : LC 50 (Water flea (Daphnia magna)): > 10,000 mg/l  
Exposure time: 24 h  
Method: Static  
Remarks: Mortality

**2-PHENOXYETHANOL:**

Toxicity to fish : LC 50 (Fathead minnow (Pimephales promelas)): 337 - 352 mg/l  
Exposure time: 96 h  
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 500 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202

Toxicity to algae : NOEC (Desmodesmus subspicatus (green algae)): > 500 mg/l  
End point: Growth inhibition  
Exposure time: 72 h  
Test Type: static test

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 23 mg/l  
Exposure time: 34 d  
Test Type: flow-through test  
Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia (water flea)): 9.43 mg/l  
Exposure time: 21 d  
End point: Reproduction Test  
Test Type: semi-static test  
Method: OECD Test Guideline 211

**Persistence and degradability**

**Components:**

**2-PHENOXYETHANOL:**

Biodegradability : Result: Readily biodegradable  
Biodegradation: 99 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F

No data available



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#### Bioaccumulative potential

##### Components:

##### GLYCERIN:

Partition coefficient: n- : log Pow: -1.76  
octanol/water

##### 2-PHENOXYETHANOL:

Partition coefficient: n- : log Pow: 1.16  
octanol/water

No data available

##### Mobility in soil

##### Components:

No data available

##### Other adverse effects

No data available

##### Product:

Additional ecological : No data available  
information

##### Components:

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

### SECTION 14. TRANSPORT INFORMATION

#### International transport regulations

##### REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

#### U.S. DOT - ROAD

Not dangerous goods

#### U.S. DOT - RAIL

Not dangerous goods

#### U.S. DOT - INLAND WATERWAYS

Not dangerous goods

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#### TRANSPORT CANADA - ROAD

Not dangerous goods

#### TRANSPORT CANADA - RAIL

Not dangerous goods

#### TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

#### INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

#### INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

#### INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

#### MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
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Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

#### SECTION 15. REGULATORY INFORMATION

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313 Component(s)**  
2-PHENOXYETHANOL 122-99-6 1.55 %

**Pennsylvania Right To Know**  
WATER 7732-18-5  
GLYCERIN 56-81-5

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2-PHENOXYETHANOL

122-99-6

**New Jersey Right To Know**

WATER

7732-18-5

GLYCERIN

56-81-5

2-PHENOXYETHANOL

122-99-6

BAOBAB EXTRACT

91745-12-9

**California Prop 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**The components of this product are reported in the following inventories:**

TSCA

: Not On TSCA Inventory

DSL

: This product contains one or several components that are not on the Canadian DSL and have annual quantity limits.

AICS

: Not in compliance with the inventory

ENCS

: Not in compliance with the inventory

KECI

: Not in compliance with the inventory

PICCS

: Not in compliance with the inventory

IECSC

: Not in compliance with the inventory

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

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**SECTION 16. OTHER INFORMATION**

**Further information**

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**NFPA:**

**HMIS III:**

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<p>Flammability</p> <p>Health      Instability</p> <p>Special hazard.</p>	<table border="1"> <tr> <td><b>HEALTH</b></td> <td><b>0</b></td> </tr> <tr> <td><b>FLAMMABILITY</b></td> <td><b>0</b></td> </tr> <tr> <td><b>PHYSICAL HAZARD</b></td> <td><b>0</b></td> </tr> </table> <p>0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>0</b>	<b>FLAMMABILITY</b>	<b>0</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>HEALTH</b>	<b>0</b>						
<b>FLAMMABILITY</b>	<b>0</b>						
<b>PHYSICAL HAZARD</b>	<b>0</b>						

#### NFPA Flammable and Combustible Liquids Classification

Not applicable

#### Full text of H-Statements

H302 Harmful if swallowed.  
H319 Causes serious eye irritation.

#### Sources of key data used to compile the Safety Data Sheet

Ashland internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"

IMDG : International Maritime Code for Dangerous Goods

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ISO : International Organization for Standardization  
 logPow : octanol-water partition coefficient  
 LCxx : Lethal Concentration, for xx percent of test population  
 LDxx : Lethal Dose, for xx percent of test population.  
 ICxx : Inhibitory Concentration for xx of a substance  
 Ecxx : Effective Concentration of xx  
 N.O.S.: Not Otherwise Specified  
 OECD : Organization for Economic Co-operation and Development  
 OEL : Occupational Exposure Limit  
 P-Statement : Precautionary Statement  
 PBT : Persistent , Bioaccumulative and Toxic  
 PPE : Personal Protective Equipment  
 STEL : Short-term exposure limit  
 STOT : Specific Target Organ Toxicity  
 TLV : Threshold Limit Value  
 TWA : Time-weighted average  
 vPvB : Very Persistent and Very Bioaccumulative  
 WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act  
 DOT : Department of Transportation  
 FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act  
 HMIRC : Hazardous Materials Information Review Commission  
 HMIS : Hazardous Materials Identification System  
 NFPA : National Fire Protection Association  
 NIOSH : National Institute for Occupational Safety and Health  
 OSHA : Occupational Safety and Health Administration  
 PMRA : Health Canada Pest Management Regulatory Agency  
 RTK : Right to Know  
 WHMIS : Workplace Hazardous Materials Information System