

# Material Safety Data Sheet

Issuing Date 14-Nov-2011

Revision Date

Revision Number 0

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Fresh Air Concentrate

**Manufacturer Address**

Rexair LLC  
230 Seventh Street  
Cadillac, MI 49601 USA  
TEL: 231-775-3413

**Distributor**

Rexair LLC  
50 W. Big Beaver  
Suite 350  
Troy, MI 48084 USA  
TEL: 248-643-7222

**Emergency Telephone Number**

248-643-7222

## 2. HAZARDS IDENTIFICATION

**CAUTION!**

### Emergency Overview

May be combustible  
May cause skin, eye, and respiratory tract irritation  
May cause central nervous system depression  
May adversely affect liver and kidney.

**Appearance** Green

**Physical State** Liquid.

**Odor** No information available

### Potential Health Effects

#### Acute Toxicity

**Eyes**

Contact with eyes may cause irritation.

**Skin**

May cause sensitization by skin contact. May cause skin irritation and/or dermatitis.

**Inhalation**

Inhalation of vapors in high concentration may cause irritation of respiratory system. Exposure to high concentrations of vapor may cause central nervous system depression.

**Ingestion**

May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system depression.

#### Chronic Effects

Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage. May cause adverse liver effects. May cause adverse kidney effects.

#### Aggravated Medical Conditions

Liver disorders. Kidney disorders. Skin disorders. Allergies.

#### Environmental Hazard

See Section 12 for additional Ecological Information.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Ethyl alcohol	64-17-5	16
Triethylene glycol	112-27-6	11

Chloroxylenol	88-04-0	1.5
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#### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
<b>Ingestion</b>	Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Get medical attention immediately if symptoms occur.
<b>Notes to Physician</b>	Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	May be ignited by friction, heat, sparks or flames.			
<b>Flash Point</b>	Not determined.			
<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.			
<b>Explosion Data</b>				
<b>Sensitivity to Mechanical Impact</b>	None			
<b>Sensitivity to Static Discharge</b>	None			
<b>Protective Equipment and Precautions for Firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.			
<b>NFPA</b>	<b>Health Hazard 1</b>	<b>Flammability 1</b>	<b>Instability 0</b>	<b>Physical and Chemical Hazards -</b>
<b>HMIS</b>	<b>Health Hazard 1*</b>	<b>Flammability 1</b>	<b>Physical Hazard 0</b>	<b>Personal Protection X</b>

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Avoid contact with the skin and the eyes. Ensure adequate ventilation. Use personal protective equipment.
<b>Environmental Precautions</b>	Refer to protective measures listed in Sections 7 and 8.
<b>Methods for Containment</b>	Dike far ahead of liquid spill for later disposal.
<b>Methods for Cleaning Up</b>	Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

#### 7. HANDLING AND STORAGE

<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition.
<b>Storage</b>	Keep away from open flames, hot surfaces and sources of ignition. Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcohol 64-17-5	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm 10% LEL TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>

### Engineering Measures

Showers  
Eyewash stations  
Ventilation systems

### Personal Protective Equipment

**Eye/Face Protection**  
**Skin and Body Protection**  
**Respiratory Protection**

Tightly fitting safety goggles.  
Lightweight protective clothing.  
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Green.	<b>Odor</b>	No information available
<b>Odor Threshold</b>	No information available	<b>Physical State</b>	Liquid
<b>pH</b>	No information available.		
<b>Flash Point</b>	No information available.	<b>Autoignition Temperature</b>	No information available.
<b>Decomposition Temperature</b>	No information available.	<b>Boiling Point/Boiling Range</b>	No information available
<b>Melting Point/Range</b>	No information available		
<b>Flammability Limits in Air</b>	No information available.		
<b>Solubility</b>	No information available.	<b>Evaporation Rate</b>	No information available
<b>Vapor Pressure</b>	No data available.	<b>Vapor Density</b>	No data available.

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions.
<b>Incompatible Products</b>	Strong oxidizing agents.
<b>Conditions to Avoid</b>	Ignitions sources - heat, sparks and open flames.
<b>Hazardous Decomposition Products</b>	Thermal decomposition can lead to release of irritating gases and vapors.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Product Information

<b>Inhalation</b>	Inhalation of vapors in high concentration may cause irritation of respiratory system.
<b>Eye Contact</b>	May cause irritation.
<b>Skin Contact</b>	May cause irritation.
<b>Ingestion</b>	May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion of large quantities may cause central nervous system effects.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Chloroxylenol	= 3830 mg/kg ( Rat )		
Triethylene glycol	= 15000 mg/kg ( Rat )	= 22460 mg/kg ( Rabbit )	
Ethyl alcohol	7060 mg/kg ( Rat )		124.7 mg/L ( Rat ) 4 h

### Chronic Toxicity

<b>Chronic Toxicity</b>	Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage. May cause adverse liver effects. May cause adverse kidney effects.
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Chemical Name	ACGIH	IARC	NTP	OSHA
Ethyl alcohol	A3	Group 1	Known	X

**ACGIH: (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen

**IARC: (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

**NTP: (National Toxicity Program)**

Known - Known Carcinogen

**OSHA: (Occupational Safety & Health Administration)**

X - Present

<b>Sensitization</b>	May cause sensitization by skin contact.
<b>Reproductive Toxicity</b>	Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage.
<b>Target Organ Effects</b>	Central nervous system (CNS). Eyes. Liver. Kidney.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Ethyl alcohol		LC50 96 h: 12.0 - 16.0 mL/L static (Oncorhynchus mykiss) LC50 96 h: 13400 - 15100 mg/L flow-through (Pimephales promelas) LC50 96 h: > 100 mg/L static (Pimephales promelas)	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	LC50 48 h: 9268 - 14221 mg/L (Daphnia magna) EC50 24 h: = 10800 mg/L (Daphnia magna) EC50 48 h: = 2 mg/L Static (Daphnia magna)
Triethylene glycol		LC50 96 h: 56200-63700 mg/L flow-through (Pimephales promelas) LC50 96 h: = 10000 mg/L static (Lepomis macrochirus) LC50 96 h: = 61000 mg/L flow-through (Lepomis macrochirus)	EC50 = 850 mg/L 5 min	EC50 48 h: = 42426 mg/L (Daphnia magna)
Chloroxylenol		LC50 96 h: 0.13-1.0 mg/L static (Oncorhynchus mykiss) LC50 96 h: 1.3-2.1 mg/L static (Lepomis macrochirus)	EC50 = 1.6 mg/L 5 min	EC50 48 h: 6.7 - 9 mg/L Static (Daphnia magna)

Chemical Name	Log Pow
Ethyl alcohol	-0.32
Triethylene glycol	-1.98

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods**                      Dispose of contents/container in accordance with local regulation

**Contaminated Packaging**                      Do not re-use empty containers.

Chemical Name	California Hazardous Waste
Ethyl alcohol	Toxic Ignitable

## 14. TRANSPORT INFORMATION

**DOT**    Not regulated

**TDG**    Not regulated

**MEX**    Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

**IECSC**    Complies

<b>15. REGULATORY INFORMATION</b>
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AICS

Complies

**Legend**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**U.S. Federal Regulations**

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**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	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****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

Chemical Name	CAS-No	California Prop. 65
Ethyl alcohol	64-17-5	Developmental

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Triethylene glycol			X		X
Ethyl alcohol	X	X	X	-	X

**International Regulations**

Chemical Name	Carcinogen Status	Exposure Limits
Ethyl alcohol		Mexico: TWA= 1900 mg/m <sup>3</sup> Mexico: TWA= 1000 ppm

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

D2B Toxic materials



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**16. OTHER INFORMATION**

**Prepared By** Product Stewardship  
23 British American Blvd.  
Latham, NY 12110  
1-800-572-6501

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**Revision Date**

**Revision Note** Initial Release.

**General Disclaimer**

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of Safety Data Sheet**