

## 1 Identification

- **Product identifier**
- **Trade name:** MICRO-CITRUS MICRO CITRUS MANGO AEROSOL Vectair
- **Manufacturer article number:** MICRO-CITRUS
- **Application of the substance / the mixture** Air Freshener.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 Vectair Systems, Inc.  
 PO Box 11068  
 Memphis, TN 38134 United States  
 info@vectairsystems.com
- **Information department:** +1 901 373 7818 (during normal office hours)
- **Emergency telephone number:** INFOTRAC +1 800 535 5053 (International) +1-352-323-3500

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Aerosol 1 H222 Extremely flammable aerosol.



GHS04 Gas cylinder

Press. Gas H280 Contains gas under pressure; may explode if heated.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02



GHS04



GHS07

- **Signal word** Danger

- **Hazard-determining components of labeling:**

Fragrance Trade Secret (919)

Citral

Linalool

- **Hazard statements**

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

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*Causes serious eye irritation.*

*May cause an allergic skin reaction.*

· **Precautionary statements**

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

*Do not spray on an open flame or other ignition source.*

*Pressurized container: Do not pierce or burn, even after use.*

*Avoid breathing dust/fume/gas/mist/vapors/spray*

*Wash thoroughly after handling.*

*Contaminated work clothing must not be allowed out of the workplace.*

*Wear protective gloves / eye protection / face protection.*

*If on skin: Wash with plenty of water.*

*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.*

*Continue rinsing.*

*If skin irritation or rash occurs: Get medical advice/attention.*

*Specific treatment (see on this label).*

*If eye irritation persists: Get medical advice/attention.*

*Wash contaminated clothing before reuse.*

*Protect from sunlight. Store in a well-ventilated place.*

*Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 4

Reactivity = 1

· **HMIS-ratings (scale 0 - 4)**



Health = 2

Fire = 4

Reactivity = 1

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

67-64-1	acetone	>50-≤100%
75-28-5	isobutane	>10-≤25%
74-98-6	propane	>2.5-≤10%
106-97-8	butane, pure	≤2.5%
	Fragrance Trade Secret (919)	≥1-≤2.5%

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## 4 First-aid measures

- **Description of first aid measures**

- **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:** If symptoms persist consult doctor.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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

No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

Use fire-extinguishing media appropriate for surrounding materials. Foam. Dry powder. Carbon dioxide. Water spray. Sand.

- **Special hazards arising from the substance or mixture** No further relevant information available.

- **Advice for firefighters**

- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

- **Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

- **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

- **Protective Action Criteria for Chemicals**

- **PAC-1:**

67-64-1	acetone	200 ppm
75-28-5	isobutane	5500* ppm
74-98-6	propane	5500* ppm
106-97-8	butane, pure	5500* ppm
120-51-4	Benzyl benzoate	5.7 mg/m <sup>3</sup>

- **PAC-2:**

67-64-1	acetone	3200* ppm
75-28-5	isobutane	17000** ppm
74-98-6	propane	17000** ppm
106-97-8	butane, pure	17000** ppm

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120-51-4	Benzyl benzoate	63 mg/m <sup>3</sup>
<b>· PAC-3:</b>		
67-64-1	acetone	5700* ppm
75-28-5	isobutane	53000*** ppm
74-98-6	propane	33000*** ppm
106-97-8	butane, pure	53000*** ppm
120-51-4	Benzyl benzoate	380 mg/m <sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**  
Do not spray on a naked flame or any incandescent material.  
Keep ignition sources away - Do not smoke.  
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.  
At this time, the remaining constituent has no known exposure limits.

<b>67-64-1 acetone</b>	
PEL	Long-term value: 2400 mg/m <sup>3</sup> , 1000 ppm
REL	Long-term value: 590 mg/m <sup>3</sup> , 250 ppm
TLV	Short-term value: 1187 mg/m <sup>3</sup> , 500 ppm Long-term value: 594 mg/m <sup>3</sup> , 250 ppm
	BEI
<b>75-28-5 isobutane</b>	
TLV	Short-term value: 2370 mg/m <sup>3</sup> , 1000 ppm (EX)
<b>74-98-6 propane</b>	
PEL	Long-term value: 1800 mg/m <sup>3</sup> , 1000 ppm
REL	Long-term value: 1800 mg/m <sup>3</sup> , 1000 ppm
TLV	refer to Appendix F in TLVs&BEIs book; D, EX

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### 106-97-8 butane, pure

REL	Long-term value: 1900 mg/m <sup>3</sup> , 800 ppm
TLV (EX)	Short-term value: 2370 mg/m <sup>3</sup> , 1000 ppm

### · **Ingredients with biological limit values:**

#### 67-64-1 acetone

BEI	50 mg/L
	Medium: urine
	Time: end of shift
	Parameter: Acetone (nonspecific)

· **Additional information:** The lists that were valid during the creation were used as basis.

### · **Exposure controls**

#### · **Personal protective equipment:**

#### · **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.

#### · **Breathing equipment:**

- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- Use suitable respiratory protective device in case of insufficient ventilation.

#### · **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### · **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### · **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### · **Eye protection:**

Safety glasses



Tightly sealed goggles

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## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information

#### · Appearance:

**Form:** Aerosol  
**Color:** According to product specification

· **Odor:** Characteristic  
 · **Odor threshold:** Not determined.

· **pH-value:** Not determined.

#### · Change in condition

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** -44.5 °C (-48.1 °F)

· **Flash point:** < 0 °C (< 32 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 460 °C (860 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

#### · Explosion limits:

**Lower:** 1.8 Vol %  
**Upper:** 13 Vol %

· **Vapor pressure at 20 °C (68 °F):** 3,000 hPa (2.300 mm Hg)

· **Density:** Not determined.

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not applicable.

#### · Solubility in / Miscibility with

**Water:** Fully miscible.

· **Partition coefficient (n-octanol/water):** Not determined.

#### · Viscosity:

**Dynamic:** Not determined.  
**Kinematic:** Not determined.

#### · Solvent content:

**Organic solvents:** 83.8 %  
**VOC content:** 25.98 %  
 259.8 g/l / 2.17 lb/gal

**Solids content:** 0.0 %

· **Other information** No further relevant information available.

## 10 Stability and reactivity

· **Reactivity** No further relevant information available.

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- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

**67-64-1 acetone**

Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

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· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

· <b>UN-Number</b> · <b>DOT, IMDG, IATA</b>	UN1950
· <b>UN proper shipping name</b> · <b>DOT</b> · <b>IMDG</b> · <b>IATA</b>	Aerosols, flammable AEROSOLS AEROSOLS, flammable
· <b>Transport hazard class(es)</b> · <b>DOT</b>	
	
· <b>Class</b> · <b>Label</b>	2.1 2.1
· <b>IMDG, IATA</b>	
	
· <b>Class</b> · <b>Label</b>	2.1 2.1
· <b>Packing group</b> · <b>DOT, IMDG, IATA</b>	not regulated
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b> · <b>Hazard identification number (Kemler code):</b> - · <b>EMS Number:</b> · <b>Stowage Code</b>	Warning: Gases F-D,S-U SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· <b>Segregation Code</b>	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.

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· **Transport/Additional information:**

· **DOT**

· **Quantity limitations**

On passenger aircraft/rail: 75 kg

On cargo aircraft only: 150 kg

· **IMDG**

· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E0

Not permitted as Excepted Quantity

· **UN "Model Regulation":**

UN 1950 AEROSOLS, 2.1

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

67-64-1	acetone	ACTIVE
75-28-5	isobutane	ACTIVE
74-98-6	propane	ACTIVE
106-97-8	butane, pure	ACTIVE
25265-71-8	Dipropylene glycol (isomer unspecified)	ACTIVE
5392-40-5	Citral	ACTIVE
78-70-6	Linalool	ACTIVE
120-51-4	Benzyl benzoate	ACTIVE
118-58-1	benzyl salicylate	ACTIVE
106-24-1	Geraniol	ACTIVE
106-22-9	dl-Citronellol	ACTIVE
127-51-5	alpha-iso-Methylionone	ACTIVE
107-75-5	Hydroxycitronellal	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

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· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

67-64-1 | acetone

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· **TLV (Threshold Limit Value established by ACGIH)**

67-64-1 | acetone

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02

GHS04

GHS07

· **Signal word** Danger

· **Hazard-determining components of labeling:**

Fragrance Trade Secret (919)

Citral

Linalool

· **Hazard statements**

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes serious eye irritation.

May cause an allergic skin reaction.

· **Precautionary statements**

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

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves / eye protection / face protection.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If skin irritation or rash occurs: Get medical advice/attention.

Specific treatment (see on this label).

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

Protect from sunlight. Store in a well-ventilated place.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Department issuing SDS:** Product Safety Department
- **Date of preparation / last revision** 04/08/2021 / -
- **Abbreviations and acronyms:**
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - HMIS: Hazardous Materials Identification System (USA)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit
  - BEI: Biological Exposure Limit
  - Flam. Aerosol 1: Aerosols – Category 1
  - Press. Gas: Gases under pressure – Compressed gas
  - Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
  - Skin Sens. 1: Skin sensitisation – Category 1