

**Fragrance Delivery Technologies Ltd.**

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# SAFETY DATA SHEET

Issuing Date 07-Aug-2013

Revision Date 10-Sep-2021

Revision Number 4

## Section 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product Name** VIVA!e Cartridge Crush

Contains D-Limonene, Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester  
Contains Allyl caproate, Ethyl butyrate, Heptanoic acid, 2-propenyl ester, D-Limonene

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

**Recommended Use** Air freshener

**Uses advised against** No information available

### 1.3. Details of the supplier of the safety data sheet Company

Fragrance Delivery Technologies LTD.

LIU 15, RA07AC06 JAFZA

P.O.Box 262800

Dubai, United Arab Emirates

TEL: +9714 887 0577

email: info@oxygenpowered.com

### For further information, please contact

**E-mail Address** info@oxygenpowered.com

### 1.4. Emergency telephone number

**Emergency Telephone** 303-389-1271

**Number** 855-259-2437

<b>Europe</b>	112
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## Section 2. Hazards identification

### 2.1. - Classification of the substance or mixture

#### REGULATION (EC) No 1272/2008

Acute Oral Toxicity	Category 4
Acute Dermal Toxicity	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Skin Sensitization	Category 1
Specific Target Organ Toxicity (Repeated Exposure)	Category 2
Acute Aquatic Toxicity	Category 2
Chronic Aquatic Toxicity	Category 2

#### Physical Hazards

Flammable liquids	Category 3
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### 2.2. Label Elements

**Signal Word****Warning****Hazard Statements**

H302 - Harmful if swallowed  
 H312 - Harmful in contact with skin  
 H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H319 - Causes serious eye irritation  
 H373 - May cause damage to organs through prolonged or repeated exposure  
 H411 - Toxic to aquatic life with long lasting effects  
 Contains Coumarin

**Precautionary Statements - EU (§28, 1272/2008)**

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 P233 - Keep container tightly closed  
 P243 - Take precautionary measures against static discharge  
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
 P273 - Avoid release to the environment

**Precautionary Statements**

P270 - Do not eat, drink or smoke when using this product  
 P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell  
 P330 - Rinse mouth  
 P322 - Specific measures (see supplemental first aid instructions on this label)  
 P271 - Use only outdoors or in a well-ventilated area  
 P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing  
 P312 - Call a POISON CENTER or doctor/ physician if you feel unwell  
 P332 + P313 - If skin irritation occurs: Get medical advice/ attention  
 P362 - Take off contaminated clothing and wash before reuse  
 P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray  
 P272 - Contaminated work clothing should not be allowed out of the workplace  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/ attention  
 P321 - Specific treatment (see supplemental first aid instructions on this label)  
 P363 - Wash contaminated clothing before reuse  
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 P233 - Keep container tightly closed  
 P240 - Ground/Bond container and receiving equipment  
 P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment  
 P242 - Use only non-sparking tools  
 P243 - Take precautionary measures against static discharge  
 P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower  
 P370 + P378 - In case of fire: Use .? for extinction  
 P403 + P235 - Store in a well-ventilated place. Keep cool  
 P501 - Dispose of contents/container to .?  
 P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/ attention

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P314 - Get medical advice/ attention if you feel unwell

P273 - Avoid release to the environment

P391 - Collect spillage

P501 - Dispose of contents/ container to an approved waste disposal plant

### 2.3. Other information

No information available.

## Section 3. Composition/information on ingredients

### 3.1. Substances

### 3.2. Mixtures

Chemical Name	EC-No	CAS-No	Weight %	EU - GHS Substance Classification	REACH No.
Ethyl acetoacetate	205-516-1	141-97-9	25-50		No data available
n-Hexyl acetate	205-572-7	142-92-7	10-20	EFFA: EH A2; FL 3; SCI 3	No data available
Heptanoic acid, 2-propenyl ester	205-527-1	142-19-8	10-20	Acute Tox. Oral Cat. 3 (H301) Acute Tox. Dermal Cat. 3 (H311) Acute Tox. Inh. Cat. 3 (H331) Aquatic Acute Tox. Cat. 1 (H400) Aquatic Chronic Tox. Cat. 3 (412)	No data available
Heptanoic acid, ethyl ester	203-382-9	106-30-9	5-10		No data available
D-Limonene	227-813-5	5989-27-5	5-10	Skin Irrit. 2 (H315) Flam. Liq. 3 (H226) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	No data available
Acetic acid, (3-methylbutoxy)-, 2-propenyl ester	266-803-5	67634-00-8	5-10	Skin Irrit. 2 (H315)	No data available
Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester	201-061-8	77-83-8	1-5	Skin Sens. 1 (H317)	No data available
Ethyl butyrate	203-306-4	105-54-4	1-5		No data available
Benzenemethanol, alpha.-methyl-, acetate	202-288-5	93-92-5	1-5		No data available
Allyl caproate	204-642-4	123-68-2	1-5	Aquatic Chronic 2 (H411)	No data available
Cyclohexanepropanoic acid, 2-propenyl ester	220-292-5	2705-87-5	1-5	EFFA: ATD 4; ATO 4; FL 4; SCI 2	No data available
2(3H)-Furanone, dihydro-5-pentyl-	203-219-1	104-61-0	1-5		No data available
Coumarin	202-086-7	91-64-5	0.1-1	Skin Sens. 1 (H317)	No data available

**For the full text of the H-Statements mentioned in this Section, see Section 16**

## Section 4. First aid measures

### 4.1. Description of first-aid measures

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
<b>Ingestion</b>	Call a POISON CENTER or doctor/physician if exposed or you feel unwell. Rinse mouth.
<b>Inhalation</b>	Get medical attention immediately if symptoms occur.

#### **4.2. Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms/Effects** Hives, Itching, Rashes, Irritation.

#### **4.3. Indication of immediate medical attention and special treatment needed**

**Notes to Physician** May cause sensitization by skin contact.

### **Section 5. Fire-fighting measures**

#### **5.1. Extinguishing media**

##### **Suitable Extinguishing Media**

Use: Water spray, Carbon dioxide (CO<sub>2</sub>), Foam.

##### **Extinguishing media which must not be used for safety reasons**

Do not use a solid water stream as it may scatter and spread fire.

#### **5.2. Special hazards arising from the substance or mixture**

##### **Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases**

Flammable. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapors or dust may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

#### **5.3. Advice for firefighters**

##### **Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus and full protective gear.

### **Section 6. Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

#### **6.2. Environmental precautions**

Prevent further leakage or spillage if safe to do so. Avoid release to the environment. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

#### **6.3. Methods and materials for containment and cleaning up**

Dike to collect large liquid spills.

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Use personal protective equipment. Use clean non-sparking tools to collect absorbed material. Sweep up and shovel into suitable containers for disposal.

#### **6.4. Reference to other sections**

See Section 12 for additional information.

## Section 7. Handling and storage

### 7.1. Precautions for Safe Handling

#### Handling

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

#### Hygiene Measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash face, hands and any exposed skin thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep cool.

### 7.3. Specific end use(s)

#### Exposure Scenario

No information available.

#### Other Guidelines

No information available.

## Section 8. Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure Limits

Chemical Name	Finland	France	Germany	Gibraltar	Greece
D-Limonene 5989-27-5	TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL: 50 ppm STEL: 280 mg/m <sup>3</sup>	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	TWA: 5 ppm TWA: 28 mg/m <sup>3</sup> Ceiling / Peak: 20 ppm Ceiling / Peak: 112 mg/m <sup>3</sup>  Skin Repr* Sen*		
Chemical Name	The Netherlands	Norway	Poland	Portugal	Spain
D-Limonene 5989-27-5		TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL: 37.5 ppm STEL: 175 mg/m <sup>3</sup> Sen*			
Chemical Name	Switzerland		Sweden	The United Kingdom	
D-Limonene 5989-27-5	STEL: 14 ppm STEL: 80 mg/m <sup>3</sup> TWA: 7 ppm TWA: 40 mg/m <sup>3</sup> Sen*				

#### Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

**Derived No Effect Level** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

**8.2. Exposure controls**

<b>Engineering Measures</b>	Showers Eyewash stations Ventilation systems
<b>Personal protective equipment</b>	Personal protection equipment should be chosen according to the CEN standards
<b>Eye Protection</b>	Tightly fitting safety goggles.
<b>Skin and Body Protection</b>	Wear suitable protective clothing.
<b>Hand Protection</b>	Protective gloves.
<b>Respiratory Protection</b>	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respiratory protection complying with EN 143.
<b>Environmental Exposure Controls</b>	Do not allow material to contaminate ground water system.

**Section 9. Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Appearance</b>	Pale yellow to lemon yellow
<b>Odor</b>	Fruity		

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
<b>pH</b>	No data available	None known
<b>Melting Point/Range</b>	No data available	None known
<b>Boiling Point/Boiling Range</b>	No data available	None known
<b>Flash Point</b>	56 °C / 132.8 °F	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limits in Air</b>	No data available	None known
<b>Vapor Pressure</b>	0.934 Pa @ 20 °C	None known
<b>Vapor Density</b>	No data available.	None known
<b>Relative Density</b>	No data available	None known
<b>Water Solubility</b>	Insoluble in water.	None known
<b>Solubility in other solvents</b>	Practically insoluble	None known
<b>Partition coefficient: n-octanol/water</b>	No data available	None known
<b>Autoignition Temperature</b>	No data available	None known
<b>Decomposition Temperature</b>	No data available	None known
<b>Decomposition Temperature</b>	No data available	None known
<b>Viscosity</b>	No data available	None known
<b>Explosive Properties</b>	No information available	
<b>Oxidizing Properties</b>	No information available	

**9.2. Other information**

<b>VOC Content (%)</b>	No information available
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**Section 10. Stability and reactivity****10.1. Reactivity**

No data available.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions****10.4. Conditions to avoid**

Heat, flames and sparks.

**10.5. Incompatible materials**

Strong oxidizing agents, Strong acids, Strong bases.

**10.6. Hazardous decomposition products**

Carbon oxides.

**Section 11. Toxicological information****11.1. Information on toxicological effects****Acute Toxicity****Product Information****Inhalation****Eye Contact****Skin Contact****Ingestion**

None under normal use conditions.

Causes serious eye irritation.

Causes skin irritation. May cause sensitization by skin contact. Harmful in contact with skin.

Harmful if swallowed. Ingestion may cause irritation to mucous membranes.

**Acute Toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity.

**The following values are calculated based on chapter 3.1 of the GHS document:**

<b>LD50 Oral</b>	396.00 mg/kg
<b>LD50 Dermal</b>	1,193.00 mg/kg
<b>Inhalation</b>	Not classified

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethyl acetoacetate	= 3980 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	
Heptanoic acid, 2-propenyl ester	= 5000 mg/kg ( Rat )	= 810 mg/kg ( Rabbit )	
n-Hexyl acetate	= 41500 µL/kg ( Rat )	> 5 g/kg ( Rabbit )	
Heptanoic acid, ethyl ester	> 34640 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	
D-Limonene	5000 mg/kg ( Rat )	>5000 mg/kg ( Rabbit )	-
Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester	= 5470 mg/kg ( Rat )		
Benzenemethanol, .alpha.-methyl-, acetate	> 5 g/kg ( Rat )	> 5 g/kg ( Rabbit )	
Allyl caproate	= 218 mg/kg ( Rat )	= 300 mg/kg ( Rabbit )	
2(3H)-Furanone, dihydro-5-pentyl-	= 6600 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	
Ethyl butyrate	= 13 g/kg ( Rat )	> 2 g/kg ( Rabbit )	
Cyclohexanepropanoic acid, 2-propenyl ester	= 585 mg/kg ( Rat )		
Coumarin	-	> 2000 mg/kg ( Rat )	
Allyl phenoxyacetate	= 475 µL/kg ( Rat )	= 820 µL/kg ( Rabbit )	

**Sensitization**

May cause an allergic skin reaction.

**Mutagenic Effects**

No information available.

**Carcinogenic Effects**

Contains no ingredients above reportable quantities listed as a carcinogen.

**Reproductive Toxicity**

No information available.

**Developmental Toxicity**

No information available.

**STOT - single exposure**

No information available.

**STOT - repeated exposure**

May cause disorder and damage to the: Liver

**Aspiration Hazard**

No information available.

**Section 12. Ecological information****12.1. Toxicity****Ecotoxicity Effects**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Ethyl acetoacetate	EC50 72 h: > 500 mg/L (Desmodesmus subspicatus)	LC50 96 h: = 290 mg/L (Oncorhynchus mykiss) LC50 96 h: = 298 mg/L (Pimephales promelas) LC50 96 h: = 307 mg/L (Lepomis macrochirus)		EC50 48 h: = 646 mg/L (Daphnia magna) EC50 24 h: = 790 mg/L Static (Daphnia magna)
n-Hexyl acetate		LC50 96 h: 3.7 - 4.4 mg/L flow-through (Pimephales promelas)		
D-Limonene		LC50 96 h: 0.619 - 0.796 mg/L flow-through (Pimephales promelas) LC50 96 h: = 35 mg/L (Oncorhynchus mykiss)		
Allyl caproate		LC50 96 h: = 30 mg/L (Carassius auratus)		

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

No information available.

Chemical Name	Log Pow
Ethyl acetoacetate	0.27

**12.4. Mobility in soil**

Adsorbs on soil.

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Other adverse effects**

This product does not contain any known or suspected endocrine disruptors.

## Section 13. Disposal considerations

**13.1. Waste treatment methods****Waste from Residues / Unused Products**

Dispose of in accordance with local regulations.

**Contaminated Packaging**

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

**Other Information**

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

## Section 14. Transport information



**IMDG/IMO**

14.1. UN-Number	UN1169
14.2. Proper Shipping Name	Extracts, aromatic, liquid
14.3. Hazard Class	3
14.4. Packing Group	III
Description	UN1169, Extracts, aromatic, liquid, 3, III, Marine Pollutant (54°C c.c.)
14.5. Marine Pollutant	None
Environmental hazard	yes
14.6. Special Provisions	None
EmS No.	F-E, S-D
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available.

**RID**

14.1. UN-Number	UN1169
14.2. Proper Shipping Name	Extracts, aromatic, liquid
14.3. Hazard Class	3
14.4. Packing Group	III
Description	UN1169, Extracts, aromatic, liquid, 3, III
14.5. Environmental hazard	yes
14.6. Special Provisions	None
Classification Code	F1

**ADR**

14.1. UN-Number	UN1169
14.2. Proper Shipping Name	Extracts, aromatic, liquid
14.3. Hazard Class	3
ADR/RID-Labels	3
14.4. Packing Group	III
Description	UN1169, Extracts, aromatic, liquid, 3, III, (D/E)
14.5. Environmental hazard	yes
14.6. Special Provisions	None
Classification Code	F1

**ICAO**

14.1. UN-Number	UN1169
14.2. Proper shipping name	Extracts, aromatic, liquid
14.3. Hazard Class	3
14.4. Packing Group	III
Description	UN1169, Extracts, aromatic, liquid, 3, III
14.5. Environmental hazard	yes
14.6. Special Provisions	None

**IATA**

14.1. UN-Number	UN1169
14.2. Proper Shipping Name	Extracts, aromatic, liquid
14.3. Hazard Class	3
14.4. Packing Group	III
Description	UN1169, Extracts, aromatic, liquid, 3, III
14.5. Environmental hazard	yes
14.6. Special Provisions	None
ERG Code	3L

<b>Section 15. Regulatory information</b>
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**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****International Inventories**

TSCA	Complies
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<b>EINECS/ELINCS</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>PICCS</b>	Complies
<b>ENCS</b>	Not determined
<b>IECSC</b>	Complies
<b>AICS</b>	Complies
<b>KECL</b>	Complies

**Legend**

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

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

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

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**15.2. Chemical Safety Assessment**

No information available

**Section 16. Other information****Full text of H-Statements referred to under sections 2 and 3**

H226 - Flammable liquid and vapor

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H331 - Toxic if inhaled

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H411 - Toxic to aquatic life with long lasting effects

H412 - Harmful to aquatic life with long lasting effects

**Key literature references and sources for data**

[www.ChemADVISOR.com/](http://www.ChemADVISOR.com/)

**Issuing Date** 07-Aug-2013

**Revision Date** 10-Sep-2021

**Revision Note** Update to Format.

**This safety data sheet complies with the requirements of Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No. 1907/2006**

**General Disclaimer**

The information provided on this SDS 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