



Zest Oxygen Refill

Issue Date	: 20/09/2023
Revision Date	:
Revision No	: 00

HOSPECO

SAFETY DATA SHEET

Section 1. Identification

Product identifier Zest Oxygen Refill (7829/7859)

Contains Citral, D-Limonene, 2,4-dimethylcyclohex-3-ene-1-carbaldehyde, Camphor

Product Use Air Freshener

Supplier HOSPECO PTY LTD

Address 17 Elizabeth St. Wetherill Park NSW 2164

Telephone 1300 46 77 32

Emergency Number 1800 638 556

Section 2. Hazards identification

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Skin Corrosion/Irritation	Category 2
Skin Sensitization	Category 1
Chronic Aquatic Toxicity	Category 2

None

Physical Hazards

Classification according to EU Directives 67/548/EEC or 1999/45/EC

The preparation is classified as dangerous in accordance with Directive 1999/45/EC.

Symbol(s) N - Dangerous for the environment Xi - Irritant
R-code(s) Xi;R38 - R43 - N;R51/53

For the full text of the R-phrases mentioned in this Section, see Section 16

Label Elements



Signal Word

Warning

Hazard Statements

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H411 - Toxic to aquatic life with long lasting effects
EUH210 - Safety data sheet available on request

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

P280 - Wear protective gloves/ eye protection/ face protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P333 + P313 - If skin irritation or rash occurs: Get medical advice/ attention
P273 - Avoid release to the environment
P391 - Collect spillage
P501 - Dispose of contents/ container to an approved landfill

Precautionary Statements

P264 - Wash face, hands and any exposed skin thoroughly after handling
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
P363 - Wash contaminated clothing before reuse
P273 - Avoid release to the environment
P391 - Collect spillage

2.1. Other information

No information available.

Section 3. Composition/information on ingredients

Substances

Chemical Name	EC-No	CAS-No	Weight %	Classification	EU - GHS Substance Classification	REACH No.
Citral	226-394-6	5392-40-5	15-<20%	Xi; R38 R43	Skin Irrit. 2 (H315) Skin Sens. 1 (H317)	No data available
7-Octen-2-ol, 2,6-dimethyl-	242-362-4	18479-58-8	15-<20%	-	EFFA: ATO 5; EDI 2A; EH A3; FL 4; SCI 3	No data available
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	268-264-1	68039-49-6	10-<15%	Xi R36/38-R43; R52/53	EFFA: ATD 5; ATO 5; EDI 2A; EH A3; EH C3; FL 4; SCI 2; SS 1B	No data available
Octanal	204-683-8	124-13-0	5-<10%	-		No data available
Bornan-2-one	200-945-0	76-22-2	5-<10%	-		No data available
Undecanal, 2-methyl-	203-765-0	110-41-8	3-<5%	-		No data available
Decanal	203-957-4	112-31-2	3-<5%	Xi;R38 R52/53 (EFFA)	Skin Irrit. 2 (H315) Aquatic Chronic 3 (H412)	No data available
Camphor	200-945-0	76-22-2	3-<5%	Xn;R20-40/22		No data available
6-Octenal, 3,7-dimethyl-	203-376-6	106-23-0	3-<5%	-		No data available
2H-Pyran, tetrahydro-4-methyl-2-(2-methyl-1-propenyl)-	240-457-5	16409-43-1	1-<3%	-		No data available
Isoamyl butyrate	203-380-8	106-27-4	1-<3%	-	EFFA: EH A4; EH C3; FL 3; SCI 3	No data available
D-Limonene	Present	5989-27-5	1-<3%	R10 Xi;R38-43 N;R50-53	Skin Irrit. 2 (H315) Flam. Liq. 3 (H226) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	No data available
Allyl caproate	204-642-4	123-68-2	1-<3%	Xn;R21/22 N;R51/53	Aquatic Chronic 2 (H411)	No data available
n-Hexyl acetate	205-572-7	142-92-7	0.1-<1%	R10; N R51/53	EFFA: EH A2; FL 3; SCI 3	No data available
Benzene, 1-methoxy-4-(2-propenyl)-	205-427-8	140-67-0	0.1-<1%	-		No data available
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	260-709-8	57378-68-4	0.1-<1%	-	EFFA: ATO 4; EH A1; EH C1; SCI 2; SS 1	No data available
PINENES	-	-	<0.1%	-		No data available
p-Cymene	202-796-7	99-87-6	<0.1%	R10 Xi;R38 Xn;R65 N;R51/53	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Aquatic Chronic 2 (H411)	No data available
Gamma -Terpinene	202-794-6	99-85-4	<0.1%	-		No data available

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

Section 4. First aid measures

Description of first-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact Wash skin with soap and water. If skin irritation or rash occurs: Get medical advice/attention. Remove and wash contaminated clothing before re-use.

Ingestion IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell

Inhalation If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Protection of First-aiders Use personal protective equipment.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects Skin irritation. Itching. Rashes.

Indication of immediate medical attention and special treatment needed

Notes to Physician May cause sensitization of susceptible persons. Treat symptomatically.

Section 5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

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

None in particular.

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

Personal precautions, protective equipment and emergency procedures

Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Dispose of contents/container to an approved waste disposal plant. Collect spillage.

Methods and materials for containment and cleaning up

Dike to collect large liquid spills.

Dam up. Soak up with inert absorbent material. Use personal protective equipment. Sweep up and shovel into suitable containers for disposal.

Reference to other sections

See Section 12 for additional information.

Section 7. Handling and storage

Precautions for Safe Handling

Handling

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Avoid breathing vapors or mists. Remove and wash contaminated clothing before re-use.

Hygiene Measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

Specific end use(s)

Exposure Scenario

No information available.

Other Guidelines

No information available.

Section 8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical Name	EU	The United Kingdom	France	Spain	Germany
Bornan-2-one 76-22-2		STEL: 3 ppm STEL: 19 mg/m ³ TWA: 2 ppm TWA: 13 mg/m ³	VME: 2 ppm VME: 12 mg/m ³	VLA-EC: 3 ppm VLA-EC: 19 mg/m ³ VLA-ED: 2 ppm VLA-ED: 13 mg/m ³	MAK: 2 ppm MAK: 13 mg/m ³ Ceiling / Peak: 4 ppm Ceiling / Peak: 26 mg/m ³
Camphor 76-22-2		STEL: 3 ppm STEL: 19 mg/m ³ TWA: 2 ppm TWA: 13 mg/m ³	VME: 2 ppm VME: 12 mg/m ³	VLA-EC: 3 ppm VLA-EC: 19 mg/m ³ VLA-ED: 2 ppm VLA-ED: 13 mg/m ³	MAK: 2 ppm MAK: 13 mg/m ³ Ceiling / Peak: 4 ppm Ceiling / Peak: 26 mg/m ³
D-Limonene 5989-27-5			TWA: 1000 mg/m ³ STEL: 1500 mg/m ³		TWA: 5 ppm TWA: 28 mg/m ³ Ceiling / Peak: 20 ppm Ceiling / Peak: 112 mg/m ³ Skin TWA: 20 ppm TWA: 110 mg/m ³
Component	Italy	Portugal	The Netherlands	Finland	Denmark
Bornan-2-one 76-22-2 (5-<10%)		STEL: 3 ppm TWA: 2 ppm		TWA: 0.3 ppm TWA: 1.9 mg/m ³ STEL: 0.9 ppm STEL: 5.7 mg/m ³	TWA: 2 ppm TWA: 12 mg/m ³
Camphor 76-22-2 (3-<5%)		STEL: 3 ppm TWA: 2 ppm		TWA: 0.3 ppm TWA: 1.9 mg/m ³ STEL: 0.9 ppm STEL: 5.7 mg/m ³	TWA: 2 ppm TWA: 12 mg/m ³
D-Limonene 5989-27-5 (1-<3%)				TWA: 25 ppm TWA: 140 mg/m ³ STEL: 50 ppm STEL: 280 mg/m ³	
p-Cymene 99-87-6 (<0.1%)					TWA: 25 ppm TWA: 135 mg/m ³
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Bornan-2-one 76-22-2	MAK: 2 ppm MAK: 13 mg/m ³	MAK: 2 ppm MAK: 13 mg/m ³	NDSCh: 18 mg/m ³ NDS: 12 mg/m ³	TWA: 2 ppm TWA: 12 mg/m ³ STEL: 4 ppm STEL: 18 mg/m ³	TWA: 2 ppm TWA: 12 mg/m ³ STEL: 3 ppm STEL: 18 mg/m ³
Camphor 76- 22-2	MAK: 2 ppm MAK: 13 mg/m ³	MAK: 2 ppm MAK: 13 mg/m ³	NDSCh: 18 mg/m ³ NDS: 12 mg/m ³	TWA: 2 ppm TWA: 12 mg/m ³ STEL: 4 ppm STEL: 18 mg/m ³	TWA: 2 ppm TWA: 12 mg/m ³ STEL: 3 ppm STEL: 18 mg/m ³
D-Limonene 5989-27- 5		STEL: 40 ppm STEL: 220 mg/m ³ TWA: 20 ppm TWA: 110 mg/m ³		TWA: 25 ppm TWA: 140 mg/m ³ STEL: 37.5 ppm STEL: 175 mg/m ³	

Section 10. Stability and reactivity

Reactivity

No data available.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Extreme heat.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous decomposition products

Carbon oxides.

Section 11. Toxicological information

Information on toxicological effects

Acute Toxicity

Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation

There is no data available for this product.

Eye Contact

There is no data available for this product.

Skin Contact

Causes skin irritation.

Ingestion

There is no data available for this product.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Citral	= 4950 mg/kg (Rat)	= 2250 mg/kg (Rabbit) > 2000 mg/kg (Rat)	
D-Limonene	5000 mg/kg (Rat)	>5000 mg/kg (Rabbit)	-
Isoamyl butyrate	> 5 g/kg (Rat)	> 5 g/kg (Rabbit)	
n-Hexyl acetate	= 41500 µL/kg (Rat)	> 5 g/kg (Rabbit)	
Pin-2(3)-ene	= 2100 mg/kg (Rat)	> 5000 mg/kg (Rat)	

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

No information available.

Aspiration Hazard

No information available.

Section 12. Ecological information

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)
Citral	EC50 72 h: = 16 mg/L (Desmodesmus subspicatus) EC50 96 h: = 19 mg/L (Desmodesmus subspicatus)	LC50 96 h: 4.6-10 mg/L static (Leuciscus idus)	EC50 = 2100 mg/L 30 min	EC50 48 h: = 7 mg/L (Daphnia magna)
Decanal			EC50 = 2.90 mg/L 25 min EC50 = 3.59 mg/L 15 min EC50 = 4.71 mg/L 5 min	
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)		
n-Hexyl acetate		LC50 96 h: 3.7-4.4 mg/L flow-through (Pimephales promelas)		
Benzene, 1-methoxy-4-(2-propenyl)-			EC50 = 0.36 mg/L 5 min EC50 = 0.39 mg/L 15 min EC50 = 0.46 mg/L 30 min	

Persistence and degradability

No information available.

Bioaccumulative potential.

No information available.

Chemical Name	Log Pow
Citral	2.76
p-Cymene	4.1

Mobility in soil

Adsorbs on soil.

Results of PBT and vPvB assessment

No information available.

Other adverse effects

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

Section 13. Disposal considerations**Waste treatment methods****Waste from Residues / Unused Products**

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

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	UN3082
14.2. Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
14.3. Hazard Class	9
14.4. Packing Group	III
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (D-Limonene, Allyl caproate), 9, III, Marine Pollutant
14.5. Marine Pollutant Environmental hazard	Product is a marine pollutant according to the criteria set by IMDG/IMO. yes
14.6. Special Provisions EmS No.	None. F-A, S-F
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	UN3082
14.2. Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
14.3. Hazard Class	9
14.4. Packing Group	III
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (D-Limonene, Allyl caproate), 9, III
14.5. Environmental hazard	yes
14.6. Special Provisions Classification Code	None. M6

ADR

14.1. UN-Number	UN3082
14.2. Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
14.3. Hazard Class	9
14.4. Packing Group	III
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (D-Limonene, Allyl caproate), 9, III, (E)
14.5. Environmental hazard	yes
14.6. Special Provisions Classification Code Tunnel Restriction Code	None. M6 (E)

ICAO

14.1. UN-Number	UN3082
14.2. Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
14.3. Hazard Class	9
14.4. Packing Group	III
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (D-Limonene, Allyl caproate), 9, III
14.5. Environmental hazard	yes
14.6. Special Provisions	None.

IATA

14.1. UN-Number	UN3082
14.2. Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
14.3. Hazard Class	9
14.4. Packing Group	III
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (D-Limonene, Allyl caproate), 9, III
14.5. Environmental hazard	yes
14.6. Special Provisions ERG Code	None. 9L

Section 15. Regulatory information

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

International Inventories

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
IECSC	Complies
AICS	Complies
KECL	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

Chemical Safety Assessment

No information available

Section 16. Other information

Full text of R-phrases referred to under Sections 2 and 3

R43 - May cause sensitization by skin contact

R38 - Irritating to skin

R20 - Harmful by inhalation

R10 - Flammable

R65 - Harmful: may cause lung damage if swallowed

R40 - Limited evidence of a carcinogenic effect

R36/38 - Irritating to eyes and skin

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R21/22 - Harmful in contact with skin and if swallowed

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation

H412 - Harmful to aquatic life with long lasting effects

H411 - Toxic to aquatic life with long lasting effects

H317 - May cause an allergic skin reaction

H226 - Flammable liquid and vapor

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H304 - May be fatal if swallowed and enters airways

Key literature references and sources for data

Disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. It is the user's responsibility to determine the safe conditions of use.