# **Product Specification**



**Product Name: LEMON TERPENES** 

Vigon Code: 501003

CAS Number: MIXTURE FEMA Number: N/A

<u>Characteristic:</u> <u>Specification:</u>

Gas Chromatograph PASSES TEST

Optical Rotation (@25c) 65.00 75.00

Odor LEMON ODOR.

Refractive Index (@20c) 1.4720 1.4760 Specific Gravity (@25c) 0.8420 0.8470

Flavor PASSES TEST

Color/appearance CLEAR, COLORLESS TO SLIGHTLY YELLOW LIQUID.

#### **Additional Product Information:**

Flash Point: 104 °F Shelf Life: 36 Months

Storage Conditions: Stable when stored in its original package, tightly sealed in a cool (46-90°F) and dry

location out of direct heat and light.

Effective Date: April 28, 2000

Printed Date: February 29, 2024



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1. IDENTIFICATION

Product Description: LEMON TERPENES

CAS # MIXTURE

Other means of identification

Vigon Item # 501003

Recommended use Concentrated aromatic and flavor ingredient which may be used in flavor and fragrance

compounds according to legal and IFRA or FEMA GRAS/FDA guidelines.

Recommended restrictions For Manufacturing Use Only

<u>Company</u> <u>24 Hour Emergency Response Information</u>

Vigon International, LLC INFOTRAC (ACCT# 78928);

127 Airport Road 1-800-535-5053 WITHIN THE U.S.A. 1-352-323-3500 OUTSIDE THE U.S.A.

E. Stroudsburg, PA 18301

For information call: 570-476-6300

Web Site: www.vigon.com

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Vigon International, LLC

Address 127 Airport Road

E. Stroudsburg, PA 18301

**United States** 

**Telephone** For information call: 570-476-6300

Website www.vigon.com

**E-mail** regulatory@vigon.com

Emergency phone number INFOTRAC (ACCT# 78928);

1-800-535-5053 WITHIN THE U.S.A. 1-352-323-3500 OUTSIDE THE U.S.A.

2. HAZARD(S) IDENTIFICATION

Physical hazards Flammable liquids Category 3

Health hazards Acute toxicity, oral Category 5

Skin corrosion/irritation Category 2
Sensitization, skin Category 1

Aspiration hazard Category 1

Environmental hazards Hazardous to the aquatic environment, acute Category 1

hazard

Hazardous to the aquatic environment, Category 1

long-term hazard



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#### Label elements



Signal word Danger

**Hazard statement** Flammable liquid and vapor. May be harmful if swallowed. May be fatal if swallowed and enters

airways. Causes skin irritation. May cause an allergic skin reaction. Very toxic to aquatic life. Very

toxic to aquatic life with long lasting effects.

Precautionary statement

**Prevention** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed. Keep cool. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing mist/vapors. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

Response IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. IF ON

SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a POISON CENTER/doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use

appropriate media to extinguish. Collect spillage.

Storage Store in a well-ventilated place. Keep cool. Store locked up.

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

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### **Mixtures**

Chemical name	Common name and synonyms	CAS number	%
LEMON TERPENES		MIXTURE	100
Additional components			
Chemical name	Common name and synonyms	CAS number	%
CARVENE	DIPENTENE (+)-P-MENTHA-1,8-DIENE (R)-(+)-Limonene (R)-4-Isopropenyl-1-methyl-1-cyclohexen e 1- methyl-4-prop-1-en-2-ylcyclohexene	5989-27-5	65 - 75
PINENE BETA	7,7-dimethyl-4-methylidenebicyclo[3.1.1] heptane (1)-6,6- dimethyl-2-methylene bicyclo(3.1.1) heptane	127-91-3	10 - 20



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#### Additional components

Chemical name Common name and synonyms		CAS number	%	
TERPINENE GAMMA	4-iso propyl-4-methyl-1,4-cyclohexadiene p-Mentha-1,4-diene 1,4-p-Menthadiene 1-METHYL-4-(1-METHYLETHYL)- 1,4-CYCLOHEXADIENE	99-85-4	3 - 6	
PINENE ALPHA dextro,laevo-pin-2(3)-ene 2,6,6 - trimethyl bicyclo-3,1,1-2-heptene 4,7,7- trimethylbicyclo[3.1.1]hept-3-ene		80-56-8	0 - 5	
GERANIAL	(2E)-3,7-dimethylocta-2,6-dienal 2,6-Octadienal, 3,7-dimethyl-, (2E)-	141-27-5	0 - 3	
MYRCENE				
NERAL	<ul><li>(Z)-citral</li><li>cis-citral</li><li>(Z)-3,7-dimethyl octa-2,6-dienal</li><li>cis-3,7-dimethyl-2,6-octadienal</li><li>(Z)-3,7-dimethyl-2,6-octadienal</li></ul>	106-26-3	0 - 2	
SABINENE	Bicyclo[3.1.0]hexane, 4-methylene-1-(1-methylethyl)-	3387-41-5	0 - 2	
CYMENE PARA	1- methyl-4-propan-2-ylbenzene 4-METHYL ISOPROPYL BENZENE Methyl isopropyl benzene DOLCYMENE 4-iso propyl toluene para-methylcumene camphogen	99-87-6	0 - 1	
LINALOOL  2,6-DIMETHYL-2,7-OCTADIENE-6-OL  1,6-Octadien-3-ol, 3,7-dimethyl-  3,7-Dimethylocta-1,6-dien-3-ol  LINALYL ALCOHOL		78-70-6	0 - 1	
NONANAL	nonanoic aldehyde nonylic aldehyde Pelargonic aldehyde NONYL ALDEHYDE	124-19-6	0 - 1	



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#### Additional components

Chemical name	ERPINOLENE cyclohexene, 586-62-9  1-methyl-4-(1-methylethylidene)-  1-METHYL-4-PROPAN-2-YLIDENE  CYCLOHEXENE  p- menth-1,4,8-diene  P- METH-1-EN-8-YL-FORMATE  4-iso propylidene-1-methyl cylohexene		%	
TERPINOLENE			0 - 1	
CAMPHENE			0 - 0.5	
THUJENE ALPHA	4-methyl-1-propan-2-ylbicyclo[3.1.0] hex-3-ene Bicyclo 3.1.0 hex-2-ene, 2-methyl-5 -(1-methylethyl)-	2867-05-2	0 - 0.5	

#### 4. FIRST-AID MEASURES

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or

persist.

Skin contact Take off immediately all contaminated clothing. Get medical attention if irritation develops and

persists. Wash skin thoroughly with soap and water for several minutes.

Eye contact Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and

persists. Promptly wash eyes with plenty of water while lifting the eye lids.

Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if Ingestion

the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low

so that stomach vomit doesn't enter the lungs.

Most important

symptoms/effects, acute and

delayed

Aspiration may cause pulmonary edema and pneumonitis. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain. May cause an allergic skin

reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment

needed

Not available.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves. Show this safety data sheet to the doctor in attendance.

#### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Unsuitable extinguishing media Water spray, fog, CO2, dry chemical, or alcohol resistant foam. Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from

the chemical

Fire may produce irritating, corrosive and/or toxic gases.



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Special protective equipment and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control.

Specific methods

Use water spray to cool unopened containers.

General fire hazards

Static charges generated by emptying package in or near flammable vapor may cause flash fire.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up

Keep unnecessary personnel away. Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.

Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

Large Spills: Dike the spilled material, where this is possible. Collect and dispose of spillage as indicated in section 13 of the SDS.

Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains.

Small Spills: Clean surface thoroughly to remove residual contamination. Wipe up with absorbent material (e.g. cloth, fleece).

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Stop the flow of material, if this is without risk. Cover with plastic sheet to prevent spreading.

**Environmental precautions** 

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid release to the environment. Retain and dispose of contaminated wash water. Contact local authorities in case of spillage to drain/aquatic environment.

#### 7. HANDLING AND STORAGE

Precautions for safe handling

Do not handle or store near an open flame, heat or other sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area.



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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

**US. ACGIH Threshold Limit Values** 

Additional components

Type

Value

PINENE ALPHA (CAS
80-56-8)

PINENE BETA (CAS
TWA
20 ppm
20 ppm
20 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Face shield is recommended.

Skin protection

**Hand protection** Chemical resistant gloves.

Other Use of an impervious apron is recommended.

Respiratory protection Respiratory protection not required. If ventilation is insufficient, suitable respiratory protection must

be provided.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using do not smoke. Keep away from food and drink. Always observe good personal

hygiene measures, such as washing after handling the material and before eating, drinking, and/or

smoking. Routinely wash work clothing and protective equipment to remove contaminants.

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

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Refer to Spec Sheet

Physical state Liquid.
Form Liquid.

Color Refer to Spec Sheet

Odor Characteristic.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling Not available.

range

Flash point 104.0 °F (40.0 °C) Closed Cup

Evaporation rate Not available.
Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.



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Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.

Solubility(ies)

Solubility (water) Insoluble

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

**Explosive properties** Not explosive.

Flammability class Combustible II estimated

Molecular formulaNot applicableOxidizing propertiesNot oxidizing.Specific gravity0.84 at 25 °C

#### 10. STABILITY AND REACTIVITY

**Reactivity**The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products if stored and handled as indicated.

#### 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Inhalation** No adverse effects due to inhalation are expected.

**Skin contact** Causes skin irritation. May cause an allergic skin reaction.

**Eye contact** Direct contact with eyes may cause temporary irritation. Causes mild eye irritation.

Ingestion May be harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or

vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Aspiration may cause pulmonary edema and pneumonitis. Skin irritation. May cause redness and

pain. May cause an allergic skin reaction. Dermatitis. Rash.

#### Information on toxicological effects

**Acute toxicity** May be fatal if swallowed and enters airways.



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Toxicological data		
Additional components	Species	Test Results
CYMENE PARA (CAS 99-87-6	3)	
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
LINALOOL (CAS 78-70-6)		
Acute		
Oral		
LD50	Rat	2790 mg/kg
TERPINOLENE (CAS 586-62-	9)	
Acute		
Dermal		
LD50	Rat	> 5 ml/kg
Oral		
LD50	Rat	4390 mg/kg
MYRCENE (CAS 123-35-3)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Oral		
LD50	Rat	> 11390 mg/kg
NERAL (CAS 106-26-3)		
Acute		
Dermal		
LD50	Rabbit	2250 mg/kg
GERANIAL (CAS 141-27-5)		
Acute		
Dermal		
LD50	Rabbit	2250 mg/kg
Oral		
LD50	Rat	500 mg/kg
PINENE ALPHA (CAS 80-56-8	3)	
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg



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Additional components Species Test Results

TERPINENE GAMMA (CAS 99-85-4)

Acute

Oral

LD50

Rat 3650 mg/kg

CARVENE (CAS 5989-27-5)

Acute

Oral

LD50 Rat

4400 mg/kg

**Skin corrosion/irritation** Causes skin irritation.

Serious eye damage/eye

Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

**ACGIH** sensitization

TURPENTINE AND SELECTED MONOTERPENES

Dermal sensitization

Dermal sensitization

(CAS 127-91-3)

TURPENTINE AND SELECTED MONOTERPENES

(CAS 80-56-8)

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** May cause an allergic skin reaction.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

CARVENE (CAS 5989-27-5) 3 Not classifiable as to carcinogenicity to humans.

MYRCENE (CAS 123-35-3) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

**Reproductive toxicity**This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

**Aspiration hazard** May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

<sup>\*</sup> Estimates for product may be based on additional component data not shown.



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dditional components		Species	Test Results
AMPHENE (CAS 79-9	92-5)		
Aquatic			
Algae	EC50	Green algae (Desmodesmus subspicatus)	> 1000 mg/l, 72 hours Method: OECD Test Guideline 201
Crustacea	EC50	Daphnia magna	0.72, 48 hours Method: OECD Test Guideline 202
Fish	LC50	Danio rerio	0.72, 96 hours Method: OECD Test Guideline 203
Other	EC50	Activated Sludge	> 1000 mg/l, 3 hours Method: OECD Test Guideline 209
YMENE PARA (CAS	99-87-6)		
Other	EC50	Pseudokirchnerella subcapitata	5.8, 72 hours
Aquatic			
Fish	LC50	Fish	2, 96 hours (Oryzias latipes)
	NOEC	Sheepshead minnow (Cyprinodon variegatus)	10, 96 hours
Acute			
Crustacea	LC50	Water flea (Daphnia magna)	>= 4.3 - <= 10 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	>= 36 - <= 64 mg/l, 96 hours
INALOOL (CAS 78-70	-6)		
Other	EC10	Activated sludge of a predominantly domestic sewage	> 100 mg/l, 3 hours
Aquatic			
Algae	EC50	Green algae (Chlamydomonas variabilis)	88.3, 96 hours DIN 38412 Part 9 static The details of the toxic effect related to the nominal concentration.
Crustacea	EC50	Daphnia magna	20, 48 hours DIN 38412 Part 11 static The details of the toxic effect related to the nominal concentration.
Fish	LC50	Ide, silver or golden orfe (Leuciscus idus)	> 22 - < 46 mg/l, 96 hours DIN 38412 Part 15 static. The details of the toxic effect related to the nominal concentration.
	LC50-R	Fish	27.8, 96 hours
ERPINOLENE (CAS 5	586-62-9)		
Crustacea	LC50	Daphnia magna	2.55, 48 h
Orastacca	_000		



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3	Species	Test Results
80-56-8)		
LC50	Daphnia magna	41, 48 hours
LC50	Fathead minnow (Pimephales promelas)	0.28, 96 hours
-27-5)		
EC50	Activated Sludge	3.94
EC50	Water flea (Daphnia pulex)	69.6, 48 hours
LC50	Fathead minnow (Pimephales promelas)	>= 0.619 - <= 0.796 mg/l, 96 hours
	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	35, 4 days
	EC50 EC50	LC50 Daphnia magna LC50 Fathead minnow (Pimephales promelas) -27-5)  EC50 Activated Sludge  EC50 Water flea (Daphnia pulex) LC50 Fathead minnow (Pimephales promelas) Rainbow trout,donaldson trout

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

**Persistence and degradability**No data is available on the degradability of this product.

Biodegradability

Percent degradation (Aerobic biodegradation-ready)

LINALOOL > 60 - < 70 %, Readily biodegradable (according to OECD

criteria).

Result: OECD 301D; EEC 92/69, C4-E (aerobic)

Test Duration: 28 days

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

#### 13. DISPOSAL CONSIDERATIONS

**Disposal instructions**Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain

into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or

used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

**Local disposal regulations**Dispose in accordance with all applicable regulations.

Hazardous waste code Not established.

Waste from residues / unused

products

Empty containers or liners may retain some product residues. This material and its container must

be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

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

disposal.

#### 14. TRANSPORT INFORMATION

**ADN** 

UN number 2319



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**UN proper shipping name** TERPENE HYDROCARBONS, N.O.S. (LEMON TERPENES)

Transport hazard class(es) 3
Subsidiary class(es) Packing group III
Environmental hazards Yes
Labels required 3

ADR

UN number 2319

**UN proper shipping name** TERPENE HYDROCARBONS, N.O.S.

Transport hazard class(es) 3
Subsidiary class(es) Packing group III
Environmental hazards Yes
Labels required 3

**RID** 

UN number 2319

**UN proper shipping name** TERPENE HYDROCARBONS, N.O.S. (LEMON TERPENES)

Transport hazard class(es) 3
Subsidiary class(es) Packing Group III
Environmental Hazards Yes
Labels required 3

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

DOT BULK

UN number 2319

**Proper shipping name** TERPENE HYDROCARBONS, N.O.S.

Hazard class 3
Packing group III
Environmental hazards

Marine pollutantYesPackaging exceptions150Packaging bulk242Labels required3

DOT

**NON-BULK** 

Not regulated as dangerous goods.

**IATA** 

UN number 2319

UN proper shipping name TERPENE HYDROCARBONS, N.O.S.

Transport hazard class(es) 3
Subsidiary class(es) Packing group III
Environmental hazards No



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Labels required 3

**IMDG** 

UN number 2319

**UN proper shipping name** TERPENE HYDROCARBONS, N.O.S.

Transport hazard class(es) 3
Subsidiary class(es) Packing group III
Environmental hazards

Marine pollutant Yes Labels required 3

Transport in bulk according No

to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

ADN; ADR; DOT BULK; IATA; IMDG; RID



#### Marine pollutant



#### 15. REGULATORY INFORMATION

**US federal regulations**This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

**Toxic Substances Control Act (TSCA)** 

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.



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OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

Classified hazard

Flammable (gases, aerosols, liquids, or solids)

categories Skin corrosion or irritation

Respiratory or skin sensitization

Aspiration hazard

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

MYRCENE (CAS 123-35-3)

California Proposition 65

California Proposition 65 - CRT: Listed date/Carcinogenic substance

MYRCENE (CAS 123-35-3) Listed: March 27, 2015

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

 Issue date
 05-05-2015

 Revision date
 06-22-2022

Version # 04

HMIS® ratings Health: 2\*

Flammability: 2 Physical hazard: 0



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List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AICIS: Australian Inventory of Industrial Chemicals.

CAS: Chemical Abstract Service.

IARC: International Agency for Research on Cancer.

IATA: International Air Transport Association.

IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous

Chemicals in Bulk.

IMDG: International Maritime Dangerous Goods.

MARPOL: International Convention for the Prevention of Pollution from Ships.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

STEL: Short term exposure limit. TWA: Time Weighted Average.

Disclaimer

Vigon International, LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, and disposal and should not be considered as a guarantee or quality specification. This product has not been evaluated for safe use in e-cigarettes or any vaping application where the product(s) is/are intentionally vaporized and inhaled. Vigon International, Inc. has performed no testing on these products in e-cig/vaping applications. It is the sole responsibility of the individual(s) purchasing this product to assess its' safety in the final application. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of Vigon's knowledge as of the date of this document. It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.

Revision information

HAZARD(S) IDENTIFICATION: Prevention

HAZARD(S) IDENTIFICATION: GHS Signal Words Physical & Chemical Properties: Multiple Properties Transport Information: Material Transportation Information

Regulatory Information: United States



Date: February 28, 2024 ייט בַּאָדָר א׳ תשפ״י Kof-K ID: K-0000507 Certificate ID: G91Z3-27LA8

Product Count: 1

# Kosher Certificate



This certificate is valid through

12/31/2024

# Vigon International, LLC 127 AIRPORT RD. EAST STROUDSBURG, PA 18301 UNITED STATES

The following product(s) Manufactured By Vigon International, LLC are certified kosher with the listed restrictions.

Product Code	Product Name	Status	Restriction	UKD#
501003	LEMON TERPENES	Parve	Kof-K symbol required 🔄	KF0PAW5Q8MM



To verify or for the most up to date certificate please go to www.koshercertificate.com 201 The Plaza, Teaneck, NJ 07666 | Phone 201.837.0500 | fax 201.837.0126





This is to certify that the following product(s) have been produced under the supervision of the Islamic Food and Nutrition Council of America(IFANCA). The production facility as well as component ingredients have been reviewed and approved. The product(s) are in compliance with the halal requirements under Islamic laws.

Date: November 21, 2023

Document #: 6718.12506.II234378

Company Name & Address: Vigon International, LLC 127 Airport Road East Stroudsburg, Pennsylvania 18301 USA

Plant Name & Address: Vigon International, LLC 127 Airport Road East Stroudsburg, Pennsylvania 18301 USA

ProductName Product Code Halal-ID Product Certificate #

1. LEMON TERPENES 501003 B61213 HC-23VIN180

Muhammad Munir Chaudry, Ph.D. President





This Certificate is valid until **January 31, 2025** and subject to renewal at that time.



#### **Food Grade Certification**



**Product Name: LEMON TERPENES** 

Vigon Code: 501003

FEMA #: N/A

Vigon International, LLC. certifies that the above flavor or ingredient is Food Grade in accordance with at least one of the following recognized organizations:

FDA/FEMA GRAS (Flavor and Extract Manufacturers Assoc. Generally Recognized as Safe)

JECFA (Joint FAO/WHO Expert Committee on Food Additives)

CoE (Council of Europe)

FLAVIS (Assigned by EFSA – European Food Safety Authority)

As a US based company, we have included the FEMA Number on this certificate however, the remaining numbers can be provided upon request. We hereby certify that this flavor or ingredient is safe for its intended use in food.

Vigon International, LLC. may terminate this certification at any time upon written notice in which this certificate shall become null and void as to any material supplied after termination of this certification.

Sincerely,

#### **US - Natural Status Certificate**



**Product Name: LEMON TERPENES** 

**Vigon Code: 501003** 

Vigon International, LLC. certifies that the product listed above is declared *natural* and *meets* the criteria of Naturalness as defined in Section 101.22 (a) (3) of Title 21 of the United States Code of Federal Regulations.

Vigon International, LLC. certifies that the product meets the following criteria:

- Does not contain any artificial flavors
- Is not adulterated or misbranded according to Food and Drug laws

Vigon International, LLC. may terminate this certification at any time upon written notice, in which this certification shall be null and void as to any material supplied after termination of the certification.

Sincerely,

# • azelis VIGO

# **Allergen/Sensitive Agents Identification Sheet**

**Product Name: LEMON TERPENES** 

Vigon Code: 501003

\* A check mark ( ) indicates the Allergen/Sensitive Agent is present. If blank it means that there is no Allergen/Sensitive present.

ALLERGEN/SENSITIVE AGENTS	*
CORN & CORN PRODUCTS	
Includes modified starch, hydrolyzed protein,sweeteners,sugars, spice carriers	
EGG & EGG PRODUCTS	
liquid and powders	
FISH	
Includes any and all species of fresh and salt water fish	
GARLIC	
Dehydrated, powdered, granules, and flakes	
GLUTEN	
Wheat, rye, barley, oats, flour, etc.	
MILK & DAIRY PRODUCTS	
Includes whey, lactose, cheese, casein, spice carriers, milk, cream, etc.	
MONOSODIUM GLUTAMATE	
PEANUTS, PEANUT OIL & PEANUT DERIVED ITEMS	
Peanut meal, flour & ground nuts, szechwan sauce, mandelona nuts, etc.	
SESAME SEEDS & SESAME OIL	
CRUSTACEANS Shrimp, lobster, rock lobster, crab, crayfish, and products made from them	
MOLLUSKS	
Clams, mussels, oysters, scallops, and products made from them	
SOY	
Includes soya powder, protein, oil, lecithin, tofu	
SULFITES	
Includes sulfur dioxide, sodium dithionite, chemicals that lists sulfite, etc.	
TREE NUTS	
Includes almonds, beechnuts, bazil nuts, nutmeg, cashews, chestnuts, etc.	
WHEAT	
Includes hydrolyzed wheat protein, flour, gluten flour, starches	
MUSTARD & MUSTARD OIL	
LUPIN	
CELERY	

Vigon International, LLC. follows Good Manufacturing Practices and has implemented HACCP systems. Our personnel are trained on the proper handling of allergenic materials.

Sincerely,

# **Organic Statement**



**Product Name: LEMON TERPENES** 

**Vigon Code: 501003** 

Vigon International, LLC. declares that the product listed above meets the requirements for nonagricultural (non-organic) substances allowed as ingredients in or on processed products labeled as "organic" or "made with organic (specified ingredients or food group(s))" [7 CFR 205.605(a)(9)].

All of the <u>flavor</u> constituents in the natural flavor product named above meet the FDA definition of a natural flavor.

No synthetic solvents were used.

This natural flavor product, including any solvents, carriers, preservatives or other processing aids used or contained therein, was produced and handled <u>without</u> the use of excluded (GMO) methods.

Ionizing radiation as described in 21 CFR 179.26 was **not** used in the processing of this natural flavor product.

This natural flavor product was <u>not</u> derived from products using sewage sludge in their agricultural production.

Sincerely,

#### **GMO Status Statement**



**Product Name: LEMON TERPENES** 

Vigon Code: 501003

Vigon International, LLC. declares that the product listed above is not derived from or produced using genetically modified organisms or their derivatives.

Sincerely,

#### **Nutritional Statement**



**Product Name: LEMON TERPENES** 

**Vigon Code: 501003** 

Vigon International, LLC. certifies that, to the best of our knowledge, the product listed above does not contribute to the nutritional value of flavors due to their extremely low usage levels and therefore falls under the nutritional labeling exemption defined in Section 101.9(a) and (j) of Title 21 of the Code of Federal Regulations.

Sincerely,

.

# **Irradiation and Sewage Sludge Statement**



**Product Name: LEMON TERPENES** 

**Vigon Code: 501003** 

Vigon International, LLC. declares that the product listed above has *not* been:

- a) Exposed to Ionizing Radiation
- b) Derived from Sewage Sludge
- c) Treated with Ethyl Oxide

Vigon International, LLC. may terminate this statement at any time upon written notice in which this statement shall be null and void as to any material supplied after termination of the statement.

Sincerely,

# **Heavy Metals and Pesticide Statement**



**Product Name: LEMON TERPENES** 

**Vigon Code: 501003** 

Vigon International, LLC. declares that, to the best of our knowledge and belief, all ingredients in the product listed above are listed as being generally recognized as safe (GRAS) by the Food and Drug administration (FDA) when used in accordance with the FDA's good manufacturing practices (GMP) and contain no residues of heavy metals and pesticides in excess of tolerances set by the FDA and the Environmental Protection Agency (EPA).

Sincerely,

#### **Stabilizer Statement**



**Product Name: LEMON TERPENES** 

**Vigon Code: 501003** 

Vigon International, LLC. declares that, to the best of our knowledge that the product listed above has not been treated with BHT, BHA, Tocopherols or any other stabilizer.

Vigon International, LLC. may terminate this statement at any time upon written notice in which this statement shall be null and void as to any material supplied after termination of the statement.

Sincerely,

# **Continuing Product Guarantee**



**Product Name: LEMON TERPENES** 

Vigon Code: 501003

In accordance with the regulations promulgated under the Federal Food, Drug, and Cosmetic Act, Vigon International, LLC. hereby provides continuing guarantee for the item listed above.

The article(s) comprising each shipment or other delivery hereafter made by Vigon International, LLC. is hereby guaranteed, as of the date of shipment or delivery, to be, on such date, not adulterated or misbranded within the meaning of the Federal Food, Drug, and Cosmetic Act, and not an article which may not, under the provisions of section 404, 505, or 512 of the act, be introduced into interstate commerce.

The guarantee herein given shall be a continuing guarantee and shall remain in full force and effect until revoked in writing by the undersigned. This guarantee shall not limit or preclude the operation and effect of any and all provisions of any agreement(s) under which the articles covered by this guarantee are sold, and the provisions of such agreement(s) shall govern in the event of any conflict or inconsistency herewith. Supplier's liability for breach of this guarantee shall in no event exceed the value of such of the articles of the supplier shipped to or on the order of Purchaser hereunder as may fail to comply with this guarantee.

This guarantee shall be void and of no effect in any instance where the particular use by Purchaser of any article to which this guarantee would otherwise apply is a use which is not in accordance with the requirements of the Federal Food, Drug and Cosmetic Act. Any and all prior guarantees and/or indemnity agreements heretofore given by supplier, are hereby revoked.

Sincerely,

# **Dietary Preferences & Restrictions**



**Product Name: LEMON TERPENES** 

Vigon Code: 501003

Vigon International, LLC. certifies that the product listed above is suitable for consumption by:

Vegans Do not eat meat, poultry, fish/seafood,eggs,dairy products, honey	
Lacto-Vegetarians Do not eat meat, poultry, fish/seafood, eggs, but do eat dairy products	•
Ovo-Vegetarians Do not eat meat, poultry, fish/seafood, dairy products, but do eat eggs	~
Vegetarians Do not eat meat, poultry, fish/seafood, but do eat dairy products and eggs	•

Sincerely,

# **Animal Testing Statement**



**Product Name: LEMON TERPENES** 

Vigon Code: 501003

Vigon International, LLC. is not in the practice of performing or commissioning animal testing on its finished products and actively evaluates the ingredients of its products through non-animal testing methods and through computational (predictive) toxicology programs.

Sincerely,

### **EU Declaration**



Vigon Code: 501003

**Product Name: LEMON TERPENES** 

The product listed above is acceptable and/or approved for use in the European Union. Below is the flavoring status based on European Regulation 2008/1334/EC.

	Flavouring Preparation
	Natural Flavouring Substance
	Flavouring Substance
	Thermal Process Flavouring
	Smoke Flavouring
	Flavour Precursor
~	Other Flavouring
	Not Applicable: Contains no ingredients whose use is intended primarily for flavour.
	Not Permitted: Contains ingredient(s) which are not permitted in flavours in the EU.

Sincerely,

Printed: 02/29/24



#### NATURAL FLAVOR PRODUCT QUESTIONNAIRE - NATIONAL ORGANIC PROGRAM USE

The **USDA National Organic Program (NOP)** allows the use of certain natural (non-synthetic) substances, including flavors, in products labeled as "Organic" or "Made with Organic...(specified ingredients or food groups)" providing they comply with provisions established in the USDA NOP (7 CFR Part 205).

The NOP defines **Non-synthetic** (natural) in 7 CFR 205.2: a substance that is derived from mineral, plant or animal matter and does not undergo a synthetic process as defined in section 6502 (21) of the Act (7 U.S.C. 6502(21)). Under the terms of the Act, "**synthetic**" means a substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant, animal or mineral sources, except that such term shall not apply to substances created by naturally occurring biological processes.

Non-synthetic Flavors authorized under the NOP, Section 205.605 (a)(9) must be from non-synthetic sources only and must not be produced using synthetic solvents, carrier systems or any artificial preservative.

In addition, Sections 205.105 (e)(f) respectively prohibit so-called "excluded" methods (GMOs) and ionizing radiation from being used to produce or during the handling of any ingredients or products under the NOP.

**FDA Definition of Natural Flavors** *FDA 21 CFR Part 101.22(a)(3)*: "...**natural flavor** or **natural flavoring** means the essential oil, oleoresin, essence or extractive, protein hydrolysate, distillate, or any product of roasting, heating or enzymolysis, which contains the flavoring constituents derived from a spice, fruit or fruit juice, vegetable or vegetable juice, edible yeast, herb, bark, bud, root, leaf or similar plant material, meat, seafood, poultry, eggs, dairy products, or fermentation products thereof, whose significant function in food is flavoring rather than nutritional. Natural flavors include [but not exclusively] the natural essences or extractives obtained from plants listed in §§182.10, 182.20, 182.40, and 182.50 and part 184 of this chapter, and the substances listed in §172.510 of this chapter."

In order to approve the use of a natural flavor used in an "organic" or "made with" product, QAI requests the information below in order to determine compliance under the terms of the NOP. QAI may request additional information as needed.

Identification of Natural Flavor Product (Name/code): LEMON TERPENES/501003

Supplier Name and Address: Vigon International, LLC. 127 Airport Road East Stroudsburg, PA 18301 USA

Type of flavor (select one or more as necessary):

Protein Hydrolysate	Extracts		Essential oil
Compounded flavor	Oleoresin		Isolate
Distillate	Compounded WONF	X	Other

# Natural Flavor Product

<b>71.</b>	a. Flavor constituents					
1.	Do all of the <u>flavor</u> constituents in the natural flavor product named above meet the <u>FDA definition of a natural flavor (see</u>					
	above)?					
	$\overline{\mathbf{X}}$ Yes $\square$ No					
2.	Natural flavors authorized for use in NOP "organic" or "made with organic" products, <u>in addition</u> , must not be produced usin synthetic extraction solvents. Extraction may only use natural, non-petroleum based solvents. Is/are the natural flavor					

☐Yes ☐No ☐XN/A, no extraction solvents used

constituent(s) made using NOP-suitable extraction solvents?\*

Printed: 02/29/24



> Please list any solvent(s) used in the production NONE	on of this Natural Flavor Product:	
	natural ethanol, super-critical carbon dioxide, authentic essential oil, and chlorinated, or halogenated solvents may be used. Propane, hexane, and	
B. Non-flavor constituents and other ingredients		
	r "made with organic" products must not contain any <b>synthetic carrier</b> ot limited to, propylene glycol, polyglycerol esters of fatty acids, mono- and	
> Please list any carrier system(s) used in this N	atural Flavor Product or attach an Ingredient Statement:	
	XN/A, no carrier system(s) used	
> Please list any preservative(s) used in this Nat	ural Flavor Product or attach an Ingredient Statement:	
XN/A, no preservative(s) used		
<ul> <li>therefore, GMO-plant extracts may not be used nor may to the search of th</li></ul>	g food preservation, pest control and pathogen control in NOP products. Other providing such use meets applicable FDA regulations, which establish	
limitations applicable to all (organic and non-organic)  > Ionizing radiation as described in 21 CFR 17  ▼ No	food products.  9.26 was <b>not</b> used in the processing of this natural flavor product?	
Please	sign this questionnaire below	
Pursuant to 7CFR §205.605(a)(9) and §205.105(e)(f), I, of form is accurate and truthful to the best of my knowledge	on behalf of the supplier, hereby attest that the information provided in this	
Company Name: Vigon International LLC.		
Printed Name: Amanda Moyer Title	Manager of Regulatory	
Signature: Amanda Miyur Date	: 02/29/24	
V		

#### **Nanomaterials**



**Product Name: LEMON TERPENES** 

Vigon Code: 501003

We hereby confirm, to the best of our knowledge, that the above referenced product has not been formulated with engineered nanomaterials.

"Engineered nanomaterial" means any intentionally producted material that has one or more dimensions of the order of 100 nm or less or that is composed of discrete functional parts, either internally or at the surface, many of which have one or more dimensions of the order of 100 nm or less, including structures, agglomerates or aggregates, which may have a size above the order of 100nm but retain properties that are characteristic of the nanoscale.

Sincerely,

# Transmissible Spongiform Encephalopathy (TSE) and Bovine • azelis Spongiform Encephalopathy (BSE) Statement





**Product Name: LEMON TERPENES** 

Vigon Code: 501003

Vigon International, LLC. products are manufactured wholly from synthetic, natural or manufactured materials and do not contain any raw materials produced from or substances derived of animal origin. Moreover, these products do not contain, and are not derived from, specified risk material as defined in Commission Decision 97/534/EC or mechanically recovered meat obtained from the vertebral column of bovine, ovine or caprine animals.

The manufacturing process does not use any ingredient of animal origin nor do our products come in contact with animal products during storage and transportation.

We further declare that our products are Dioxin Free.

Therefore, to the best of our knowledge the product listed above are free from Transmissible Spongiform Encephalopathy (TSE) and Bovine Spongiform Encephalopathy (BSE).

Vigon International, LLC. may terminate this statement at any time upon written notice, in which this statement shall be null and void as to any material supplied after termination of the statement.

Sincerely,

Vigon Regulatory Department regulatory@vigon.com

Date of Issue: February 29, 2024

# **International Inventories**



Yes

**Product Name: LEMON TERPENES** 

Vigon Code: 501003

Country(s) or region Inventory name On inventory (yes/no)\*

Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
China	Inventory of Existing Chemical Substances in Chine (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

United States & Puerto Rico Toxic Substances and Control Act (TSCA) Inventory

Sincerely,

Vigon Regulatory Department regulatory@vigon.com

Date of Issue: February 29, 2024

## **Residual Solvents**



**Product Name: LEMON TERPENES** 

Vigon Code: 501003

Based on our knowledge of our production process, raw materials and equipments used we do not expect residual solvents to be present.

Sincerely,

# **EU Fragrance Allergen Statement**



**Product Name: LEMON TERPENES** 

Vigon Code: 501003

The product listed above contains the following substances listen in European Directive 76/768/EEC established by the SCCNFP declared allergens.

needs to be reviewed

Sincerely,

## **Melamine Statement**



**Product Name: LEMON TERPENES** 

Vigon Code: 501003

Based on our knowledge of our production process, raw materials and equipment used we do not expect melamine to be present.

Sincerely,

#### **Phthalate Statement**



**Product Name: LEMON TERPENES** 

Vigon Code: 501003

We've performed a risk assessment on our product contact plastics which include tubes, joints, caps, pumps, as well as packaging (e.g. plastic wraps and bags) and can confirm that our plastic products do not contain certain phthalate esters (most notably bis-2-Ethylhexyl phthalate[DEHP] and dibutyl phthalate [DBP]).

Sincerely,



Vigon International, LLC. +1.570.476.6300 | sales@vigon.com

USA Country of Origin:

Chemical Name: LEMON TERPENES

CAS#: **MIXTURE** LEMON TERPENES

104°F (40°C) Flash Point:

NONE Allergens:

0.000 Liters:

Code: 501003

ID#: EXAMPLE

LB KG

0.000 | Produced on: N/A Approx. Gross: 0.000

0.000 | Best used before: 0.000 N/A Approx. Tare:

Net: **EXAMPLE** 0.000 Lot #: 0.000

STORAGE CONDITIONS: Stable when stored in its original package, tightly sealed in a cool (46-90°F) and dry location out of direct heat and light.

INSTRUCTIONS FOR USE: Ask your employer for guidance regarding the safe use and handling of this product in your specific workplace environment based on the information provided in Vigon's Safety Data Sheet (SDS).

HAZARD STATEMENT: Flammable liquid and vapor. May be harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.P.R.E.C.A.U.T.I.O.N.A.R.Y.S.T.A.T.E.M.E.N.T.: -PREVENTION- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Keep cool. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing mist/vapors. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.-RESPONSE-IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a POISON CENTER/doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.-STORAGE- Store in a well-ventilated place. Keep cool. Store locked up.-DISPOSAL- Dispose of contents/container in accordance with local/regional/national/international regulations.

