Product Specification

Product Name: DIPENTENE 38 PF

Vigon Code: 503489

CAS Number: MIXTURE

FEMA Number: N/A

VIGON

zelis

Characteristic:	Specification:	
Camphene %	0.00	6.50
Density (@20c)	0.8430	0.8510
Dipentene%	34.00	47.00
Gas Chromatograph	PASSES TEST	
Odor	LIME ODOR.	
Peroxide Value (mmol/l)	0.00	120.00
Refractive Index (@20c)	1.4760	1.4820
Terpinene Alpha%	11.00	27.00
Terpinene Gamma%	9.00	13.00
Terpinolene	9.00	15.00
Color/appearance	CLEAR, COLOR	LESS TO SLIGHTLY YELLOWISH LIQUID.

Additional Product Information:

Flash Point: 124 °F

Shelf Life: 12 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: June 22, 2022

Printed Date: June 2, 2023



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 Version # 01
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1. IDENTIFICATION Product Description: DIPENTENE 38 PF CAS# MIXTURE Other means of identification Vigon Item # 503489 Recommended use Concentrated aromatic ingredient which may be used fragrance compounds according to legal and IFRA guidelines. **Recommended restrictions** None known. 24 Hour Emergency Response Information Company INFOTRAC (ACCT# 78928); Vigon International, LLC 1-800-535-5053 WITHIN THE U.S.A. 127 Airport Road 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 570-476-6300 For information call: Website www.vigon.com E-mail regulatory@vigon.com Emergency phone number **INFOTRAC** (ACCT# 78928); 1-800-535-5053 WITHIN THE U.S.A.

OUTSIDE THE U.S.A.

2. HAZARD(S) IDENTIFICATION

Physical hazards	Flammable liquids	Category 3
Health hazards	Skin corrosion/irritation	Category 2
	Sensitization, skin	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1

Danger

1-352-323-3500

Label elements





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Hazard statement	Flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. May cause allergic skin reaction.	
Precautionary statement		
Prevention	Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/eye protection/face 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. 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	%
DIPENTENE 38 PF		MIXTURE	100
Additional components			
Chemical name	Common name and synonyms	CAS number	%
CAMPHENE	dextro,laevo-camphene 6,6- dimethyl-5-methylidenebicyclo [2.2.1]heptane 2,2-DIMETHYL-3-METHYLENE NORBORNANE 3,3-DIMETHYL-2-METHYLENE NORCAMPHANE	79-92-5	
CARENE DELTA	3,7,7-trimethyl bicyclo(4.1.0)hept-3-ene 3,7,7-trimethyl bicyclohept-3-ene 3,7,7-trimethyl-3-norcarene	13466-78-9	
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	



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Additional components			
Chemical name	Common name and synonyms	CAS number	%
PHELLANDRENE ALPHA	2- methyl-5-propan-2-ylcyclohexa-1,3-diene 1,3- cyclohexadiene, 2-methyl-5-(1-methylethyl)- p- mentha-1,5-diene 1- methyl-4-isopropyl-1,5-cyclohexadiene 2- methyl-5-propan-2-ylcyclohexa-1,3-diene	99-83-2	
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	
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	
Composition comments	According to REACH identification rules, this prot the following constituents (> 10%): - d-limonene (1-methyl-4-(1-methylethenyl)-, (4R - l-limonene (1-methyl-4-(1-methylethenyl)-, (4S) - terpinolene (1-methyl-4-(1-methylethyl)-1,3 - gamma terpinene (1-methyl-4-(1-methylethyl)-1,3 - gamma terpin)-, cyclohexene - CAS 5989 -, cyclohexene - CAS 5989- clohexene - CAS 586-62-9) -cyclohexadiene - CAS 99-8 ,4-cyclohexadiene - CAS 99 ss than 10% are considered -diene - CAS 5989-27-5), I-li inolene (p-mentha-1,4(8)-die	-27-5) 54-8) 36-5) 9-85-4) as impurities. monene
4. FIRST-AID MEASURES			
Inhalation	If breathing is difficult, remove to fresh air and ke For breathing difficulties, oxygen may be necess persist.		-
Skin contact	Take off immediately all contaminated clothing. O persists. Wash skin thoroughly with soap and wa		tion develops and
Eye contact	Remove contact lenses, if present and easy to d persists. Promptly wash eyes with plenty of wate		ritation develops and
Ingestion	Call a physician or poison control center immedia the person is conscious). Do not induce vomiting so that stomach vomit doesn't enter the lungs.	-	
Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary edema and pro temporary irritation. Skin irritation. May cause rea reaction. Dermatitis. Rash.		



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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 MEASU	RES
Suitable extinguishing media	Water spray, fog, CO2, dry chemical, or alcohol resistant foam.
Unsuitable extinguishing media	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.
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
proceduresKeep 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.

Methods and materials for containment and cleaning up

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.

The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Prevent product from entering drains. Do not allow material to contaminate ground water system. Absorb in vermiculite, dry sand or earth and place into containers.

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

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Collect and dispose of spillage as indicated in section 13 of the SDS.



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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. All equipment used when handling the product must be grounded. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling. Take precautionary measures against static discharges. Avoid breathing vapor.
Conditions for safe storage,	Keep container closed. Handle containers with care. Open slowly in order to control possible
including any incompatibilities	pressure release. Store in a cool, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

US. ACGIH Threshold Limit Values

Additional components	Туре	Value	
CARENE DELTA (CAS 13466-78-9)	TWA	20 ppm	
PINENE ALPHA (CAS 80-56-8)	TWA	20 ppm	
PINENE BETA (CAS 127-91-3)	TWA	20 ppm	

Biological limit values

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



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Exposure guidelines	Components with limit values that require monitoring at the workplace:		
	DL-limonene (CAS 138-86-3)		
	Sweden: limit value - 8 hours = 150 mg/m³ (25 ppm)		
	Sweden: limit value - short term = 300 mg/m³ (50 ppm)		
	D-limonene (CAS 5989-27-5)		
	Germany (AGS): limit value - 8 hours = 110 mg/m³ (20 ppm)		
	Germany (AGS): limit value - short term - 15 min = 220 mg/m³ (40 ppm)		
	Germany (DFG): limit value - 8 hours = 28 mg/m³ (5 ppm)		
	Germany (DFG): limit value - short term - 15 min = 112 mg/m ³ (20 ppm)		
	P-cymene (CAS 99-87-6)		
	Belgium: limit value - 8 hours = 100 mg/m³ (20 ppm)		
	Denmark: limit value - 8 hours = 135 mg/m³ (25 ppm)		
	Denmark: limit value - short term = 270 mg/m³ (50 ppm)		
	Sweden: limit value - 8 hour = 140 mg/m ³ (25 ppm)		
	Sweden: limit value - short term = 190 mg/m ³ (35 ppm)		
	Delta 3 carene (CAS 13466-78-9)		
	Belgium: limit value - 8 hour = 20 ppm		
	Sweden: limit value - 8 hour = 150 mg/m³ (25 ppm)		
	Sweden: limit value - short term = 300 mg/m³ (50 ppm)		
	Alpha pinene (CAS 80-56-8)		
	Sweden: limit value - 8 hours = 150 mg/m³ (25 ppm)		
	Sweden: limit value - short term = 300 mg/m³ (50 ppm)		
	Beta pinene (CAS 127-91-3)		
	Belgium: limit value - 8 hours = 20 ppm		
	Denmark: limit value - 8 hours = 140 mg/m³ (25 ppm)		
	Denmark: limit value - short term = 280 mg/m³ (50 ppm)		
	Sweden: limit value - 8 hour = 150 mg/m³ (25 ppm)		
	Sweden: limit value - short term = 300 mg/m³ (50 ppm)		
	Terpenes		
	Austria: limit value - 8 hours = 560 mg/m³ (100 ppm)		
	Austria: imit value - short term = 560 mg/m³ (100 ppm)		
	Denmark : limit value - 8 hours = 140 mg/m³ (25 ppm)		
	Denmark : limit value - short term = 280 mg/m³ (50 ppm)		
	Sweden: limit value - 8 hours = 150 mg/m ³ (25 ppm)		
	Sweden: limit value - short term = 300 mg/m ³ (50 ppm)		
	DNEL (Derived No-Effect Level): Workers - Acute/short-termexposure Local effects - dermal:		
	0.222 mg/cm ²		
	· DNEL (Derived No-Effect Level): Workers - Long-termexposure Systemic effects - inhalation:		
	33.3 mg/m ³		
	· DNEL (Derived No-Effect Level): General population - Long-termexposure		
	Systemic effects - dermal: 4.76 mg/kg bw/day		
	Systemic effects - inhalation: 8.33 mg/m ³		
	Systemic effects - oral: 4.76 mg/kg bw/day		
	· PNEC (Predicted No-Effect Concentration) aqua (freshwater): 5.4 ug/L		
	· PNEC (Predicted No-Effect Concentration) aqua (marine water): 0.54 ug/L		
	· PNEC (Predicted No-Effect Concentration) Sewage Treatment Plant: 1.8 mg/L		
	· DNEC (Predicted No Effect Concentration) sediment (freshwater): 1.640 mg/kg sediment dw		

· PNEC (Predicted No-Effect Concentration) sediment (freshwater): 1.649 mg/kg sediment dw

· PNEC (Predicted No-Effect Concentration) sediment (marine water): 0.165 mg/kg sediment dw

· PNEC (Predicted No-Effect Concentration) soil: 0.328 mg/kg soil dw

The primary duty is to comply with risk management measures which enable to limit exposures as



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	much as possible and to be in line with exposure reference levels. Occupational exposure limits and DNELs are health-based but they are not necessarily set in the		
	same way.		
This sheet is based on the current valid lists for occupational exposure limit values. and PNECs values are derived from the chemical safety assessment conducted for • PNEC (Predicted No-Effect Concentration) oral: 3.33 mg/kg food			
Appropriate engineering controls	Use explosion-proof ventilation equipment to stay below exposure limits.		
Individual protection measures, su Eye/face protection	ich as personal protective equipment 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 mus be provided.		
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.		
General hygiene considerations	When using do not smoke. 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	< -112 °F (< -80 °C)
Initial boiling point and boiling	348.8 - 352.4 °F (176 - 178 °C)
range	
Flash point	124.0 °F (51.1 °C) Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explos	ive limits
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	4.77 hPa at 20 °C
Vapor density	4.7
Relative density	Not available.



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Solubility(ies)	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	4.59 at 25 °C
Auto-ignition temperature	Not available.
Decomposition temperature	When heated to decomp, emits acrid smoke and fumes.
Viscosity	0.85 mPa⋅s at 25 °C
Other information	
Flammability class	Combustible II estimated
Molecular formula	C10-H16
Molecular weight	136.23 g/mol
Specific gravity	0.85 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	irect contact with eyes may cause temporary irritation. Causes mild eye irritation.		
	Ingestion	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.		
r	Symptoms related to the hysical, chemical and oxicological characteristics	Aspiration may cause pulmonary edema and pneumonitis. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.		
I	nformation on toxicological effects			
ł	Acute toxicity	May be fatal if swallowed and enters airways. May cause an allergic skin reaction.		



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Product	Species	Test Results	
DIPENTENE 38 PF			
Acute			
Dermal			
LD50	Rabbit	> 5000 mg/kg studies performed with individual constituents of dipentene multiconstituent.	
Oral			
LD50	Rat	> 2000 mg/kg OECD 401	
Additional components	Species	Test Results	
CARENE DELTA (CAS 13466	-78-9)		
Acute			
Oral			
LD50	Rat	4800 mg/kg	
CYMENE PARA (CAS 99-87-6	3)		
Acute			
Dermal			
LD50	Rabbit	> 5000 mg/kg	
PINENE ALPHA (CAS 80-56-8	3)		
Acute			
Dermal			
LD50	Rabbit	> 5000 mg/kg	
* Estimates for product ma	ay be based on additional compor	nent data not shown.	
Skin corrosion/irritation		Causes skin irritation. Some constituents of the substance were tested in rabbits (d-limonene, l-limonene and gamma terpinene) and induced skin irritation effects.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation. Only slight to moderate irritating effects were observed in an acute eye irritation study performed with the substance in rabbits, according to the OECD guideline 405. The CLP regulation and the directive 67/548/EEC criteria for classification were not met		
Respiratory or skin sensitizatio	n		
ACGIH sensitization			
TURPENTINE AND S (CAS 127-91-3)	ENTINE AND SELECTED MONOTERPENES Dermal sensitization 127-91-3)		
TURPENTINE AND S (CAS 13466-78-9)	OSELECTED MONOTERPENES Dermal sensitization		
TURPENTINE AND S (CAS 80-56-8)	SELECTED MONOTERPENES	Dermal sensitization	
Respiratory sensitization	Not a respiratory sensitizer.		



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Skin sensitization	May cause an allergic skin reaction. D-limonene and l-limonene were found to be skin sensitizing in several animal studies especially in assays performed in mice according to the OECD guideline 429 (LLNA - Local Lymph Node Assay). Human studies confirmed thesedata. Results on d-limonene and l-limonene are deemed to be representative of the skin sensitizing properties of dipentene multiconstituent.	
Germ cell mutagenicity	 Dipenters of dipenterie multiconstituent. Dipentene multiconstituent did not induce mutations in bacteria in a reverse mutation test (OECD 471 - Ames test). Other in vitro genotoxicity tests were conducted with either d-limonene or other structural similar compounds, constituents of the substance: a chromosome aberration test in human lymphocytes and a sister chromatid exhange in Chinese hamster ovary cells, a gene mutation test in mouse lymphoma L5178Y cells. These studies did not show any genotoxic effects. D-limonene was also tested in vivo in several comet assays. No genotoxic effects were observed. 	
Carcinogenicity	imonene was tested in a 2-year oral carcinogenicity study in mice and rats. This constituent luced a male-rat specific carcinogenic effect on kidneys, not relevant for humans. sults obtained with d-limonene are deemed to be representative of the different constituents of pentene multiconstituent.	
IARC Monographs. Overall	Evaluation of Carcinogenicity	
Not listed.		
OSHA Specifically Regulate	ed Substances (29 CFR 1910.1001-1053)	
Not listed.		
US. National Toxicology Pro	ogram (NTP) Report on Carcinogens	
Not listed.		
Reproductive toxicity	No reliable data available for this substance. Testing will be performed for REACH purposes.	
Specific target organ toxicity - single exposure	No specific target organ toxicity was observed in the LD determination studies.	
Specific target organ toxicity - repeated exposure	Several oral repeated dose toxicity studies were carried out with d-limonene in different species (rat, mouse, dog). Clinical signs were only observed for doses >/= 1000 mg/kg bw/d. The most relevant NOAEL value is considered to be: 500 mg/kg bw/d from a 90-d mouse study. Results obtained with d-limonene are deemed to be representative of the different constituents of the substance.	
Aspiration hazard	May be fatal if swallowed and enters airways. If swallowed accidentally, the product may enter the lungs due to its low viscosity.	



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12. ECOLOGICAL INFORMATION

Ecotoxicity	Very toxic to aquatic life with long lasting effects. D-limonene (CAS 5989-27-5) LC50 (96h), fish (Pimephales promelas): 0.70 mg/L (mea EC50 (48 h), daphnia (Daphnia magna): 0.36 mg/L (nom EC50 (48 h), daphnia (Daphnia magna): 0.42 mg/L (mea LC50 (48 h), daphnia (Daphnia magna): 0.57 mg/L (mea DL-limonene (CAS 138-86-3) LC50 (96 h), fish (Oryzias latipes): 1.1 mg/L EC50 (48 h), daphnia (Daphnia magna): 0.7 mg/L NOAEC (21 d), daphnia (Daphnia magna): 0.7 mg/L EC50 (72 h), algae (Pseudokirchneriella subcapitata): > EC50 (72 h), algae (Pseudokirchneriella subcapitata): > NOEC (72 h), algae (Pseudokirchneriella subcapitata): > NOEC (72 h), algae (Pseudokirchneriella subcapitata): > MOEC (72 h), algae (Pseudokirchneriella subcapitata): > EC50 daphnia (Daphnia magna): > 1.51 mg/L (measured Alpha terpinene (CAS 99-85-4) EC50 (48 h), daphnia (Daphnia magna): 1.85 mg/L (mea LC50 (48 h), daphnia (Daphnia magna): 1.85 mg/L (mea LC50 (48 h), daphnia (Daphnia magna): 1.38 mg/L (mea	ainal concentration, OECD 202) asured concentration) sured concentration) 1.6 mg/L (based on growth rate) 21 mg/L (based on biomass) .6 mg/L (based on growth rate) d concentration, OECD 202) asured concentration) sured concentration) sured concentration) sured concentration)

Product		Species	Test Results
DIPENTENE 38 PF			
Aquatic			
Crustacea	EC50	Daphnia	36, 48 hours Calculated
Fish	LC50	Fish	7.9565, 96 h Calculated
Additional components	6	Species	Test Results
CAMPHENE (CAS 79-	-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



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Additional components		Species	Test Results	
CARENE DELTA (CAS 134	66-78-9)			
Aquatic				
Acute				
Crustacea	EC50	Daphnia magna	0.797, 48 hours (measured concentration - OECD 202)	
CYMENE PARA (CAS 99-8	7-6)			
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	
PINENE ALPHA (CAS 80-5	6-8)			
Aquatic				
Crustacea	LC50	Daphnia magna	41, 48 hours	
Fish	LC50	Fathead minnow (Pimephales promelas)	0.28, 96 hours	
* Estimates for product may	be based on a	dditional component data not shown.		
sistence and degradability	Readily biodegradable. Degradation after 28 days: 80% (O2 consumption) - OECD 301D - activated sludge, domestic, non-adapted.			
accumulative potential				
Partition coefficient n-octand DIPENTENE 38 PF	ol / water (log k	(ow) 4.59, at 25 °C		
bility in soil	No data av	No data available.		
er 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.		
DISPOSAL CONSIDE	RATIONS			
oosal instructions	into sewers used conta	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.		
al disposal regulations	Dispose in	Dispose in accordance with all applicable regulations.		
ardous waste code	Not establi	Not established.		
	- ·		duran This wasterial at 120 and 1	

Waste from residues / unused
productsEmpty containers or liners may retain some product residues. This material and its container must
be disposed of in a safe manner (see: Disposal instructions).



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Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

ADN	
UN number	2319
UN proper shipping name	TERPENE HYDROCARBONS, N.O.S.
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing group	11
Environmental hazards	No
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	No
Labels required	3
RID	
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
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 pollutant	No
Labels required	3
DOT	
NON-BULK	
Not regulated as dangerous g	oods.
ΙΑΤΑ	
UN number	2319
UN proper shipping name	TERPENE HYDROCARBONS, N.O.S.
Transport hazard class(es)	3



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Subsidiary class(es)	-
Packing group	111
Environmental hazards	No
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	111
Environmental hazards	
Marine pollutant	No
Labels required	3
Transport in bulk according	Not applicable.
to Annex II of MARPOL	
73/78 and the IBC Code	

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



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.

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.



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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) International Inventories Country(s) or region On inventory (yes/no)* Inventory name Australia Australian Inventory of Industrial Chemicals (AICIS) No Canada Domestic Substances List (DSL) No Canada Non-Domestic Substances List (NDSL) No China Inventory of Existing Chemical Substances in China (IECSC) No Europe European Inventory of Existing Commercial Chemical No Substances (EINECS) Europe European List of Notified Chemical Substances (ELINCS) No Japan Inventory of Existing and New Chemical Substances (ENCS) No Korea Existing Chemicals List (ECL) No New Zealand New Zealand Inventory No Philippines Philippine Inventory of Chemicals and Chemical Substances No (PICCS) Taiwan Taiwan Chemical Substance Inventory (TCSI) No United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

Issue date	01-26-2022
Revision date	01-26-2022
Version #	01
HMIS® ratings	Health: 2*
	Flammability: 2
	Physical hazard: 0



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Disclaimer

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 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, 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.





Rabbi Avram Ossey Rabbinic Administrator 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



Disclaimer: This certificate is the private property of KOF-K Kosher Supervision and cannot be reposted without the express permission of KOF-K Kosher Supervision. Page 1 of 1



Vigon Code: 503489

FEMA #: N/A

Vigon International, LLC. certifies that the above ingredient is **<u>not</u>** food grade.

Vigon International, LCC. 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,



Vigon Code: 503489

* 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,

Vigon Regulatory Department regulatory@vigon.com Date of Issue: June 2, 2023

127 Airport Road East Stroudsburg, PA 18301-9629 USA | Tel: +1 570-476-6300 | Fax: +1 570-476-1110 | Email: regulatory@vigon.com | Web: vigon.com



Vigon Code: 503489

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: DIPENTENE 38 PF

Vigon Code: 503489

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,



Vigon Code: 503489

Vigon International, LLC. declares that the product listed above has <u>not</u> 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,



Vigon Code: 503489

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: DIPENTENE 38 PF

Vigon Code: 503489

Vigon International, LLC. declares that, to the best of our knowledge that the product listed above has been treated with:

<u>Stabilizer(s)</u>

TOCOPHEROLS

Percentage 0.0100

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 Code: 503489

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,



Vigon Code: 503489

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,



Vigon Code: 503489

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. However, some ingredients used in our products have been subjected to animal testing by the academic community, government agencies, or within the chemical industry.

Sincerely,

Nanomaterials



Product Name: DIPENTENE 38 PF

Vigon Code: 503489

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,

Vigon Code: 503489

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 Code: 503489

• Is not restricted as such according to the Standards of the International Fragrance Association (IFRA) (up to and including the 50th amendment)

• Bears no IFRA specifications

The IFRA Standards regarding use restriction are based on safety assessments by the Panel of Experts of the Research Institute for Fragrance Materials (RIFM) and are enforced by the IFRA Scientific Committee.

It is the ultimate responsibility of our customer to ensure the safety of the final product by further testing if need be.

Sincerely,

Residual Solvents



Product Name: DIPENTENE 38 PF

Vigon Code: 503489

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

Sincerely,



Vigon Code: 503489

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

dipentene 34-45%

Sincerely,

Melamine Statement



Product Name: DIPENTENE 38 PF

Vigon Code: 503489

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: DIPENTENE 38 PF

Vigon Code: 503489

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,

		Country of Origin:	FRANCE	N
VPASSION FOR SIMPLICITY HOLDEN		Chemical Name:		
DIDENITENIE	20 DE	CAS#:	MIXTURE	
DIPENTENE	JOFF	Flash Point:	124ºF (51ºC)	
		Allergens:	NONE	
Code: 503489 ID #: EXA	MPLE	Liters:	0.000	
Approx. Gross:	KG LB 0.000 0.000	Produced on:	N/A	
Approx. Tare:	0.000 0.000	Best used before:	N/A	
Net:	0.000 0.000	Lot #:	EXAMPLE	
STORAGE CONDITIONS: Stable when stored in its original package, tig a cool (46-90°F) and dry location out of direct heat and light.	htly sealed in			

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 fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. May cause allergic skin reaction. PRECAUTIONARY STATEMENT: -PREVENTION- Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/eye protection/face 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. 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.

