

Product

DIPENTENE 5100

Print Date

08/30/2022

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name

DIPENTENE 5100

Sales Number

00040979

Cust. Material SDS Number

00040979 R00000219556

Product Use Description

Fragrance Ingredient

Company

: IFF CHEMICAL HOLDINGS, INC.

2051 NORTH LANE AVENUE JACKSONVILLE FL 32254

Telephone

(904) 783-2180

Telefax Emergency telephone (904) 695-4616

: +1 800 424 9300

SECTION 2 HAZARDS IDENTIFICATION

GHS-Classification

Flammable liquids, Category 3 Skin irritation, Category 2 Eye irritation, Category 2A Skin sensitization, Sub-category 1B Reproductive toxicity, Category 2, Oral Aspiration hazard, Category 1

GHS-Labeling

Symbol(s)

:





Signal Word

: Danger

Hazard Statements

: H226: Flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

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H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H361: Suspected of damaging fertility or the unborn child if

swallowed.

Precautionary Statements

: P210: Keep away from heat/ sparks/ open flames/ hot surfaces. No

smoking.

P240: Ground/bond container and receiving equipment.

P280: Wear protective gloves/ protective clothing/ eye protection/

face protection.

P301 + P310: IF SWALLOWED: Immediately call a POISON

CENTER/ doctor.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P331: Do NOT induce vomiting.

P403 + P235: Store in a well-ventilated place. Keep cool.

Carcinogenicity:

IARC	MYRCENE	100 05 0	
171110	MITCENE	123-35-3	

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

Component	CAS-No.	
Hydrocarbons, terpene processing by-products	68956-56-9	

SECTION 4. FIRST AID MEASURES

First aid procedures

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Inhalation

: Remove from exposure site to fresh air and keep at rest. If victim is unconscious, remove foreign bodies from the mouth. If victim has stopped breathing, give artificial respiration. Obtain medical advice.

Skin contact

: Remove contaminated clothes. Wash thoroughly with water (and

soap). Contact physician if symptoms persist.

Eye contact

: Flush immediately with water for at least 15 minutes. Contact

physician if symptoms persist.

Ingestion

: Rinse mouth with water and obtain medical advice.

Notes to physician

Risks

: May be fatal if swallowed and enters airways.

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation.

Suspected of damaging fertility or the unborn child if swallowed.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point

114.80 °F (46.00 °C)

Fire fighting

Suitable extinguishing media

: Use water spray, dry chemical, carbon dioxide or appropriate foam.

Protective equipment and precautions for firefighters

Special protective equipment for

fire-fighters

: Wear NIOSH approved self-contained breathing apparatus and full protective clothing when fighting fires involving chemicals. Use

water spray to cool containers exposed to fire.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

: Avoid inhalation and contact with skin and eyes. A self-contained breathing apparatus is recommended in case of a major spill.

Environmental precautions

: Keep away from drains, surface- and groundwater and soil.

Methods for containment / Methods for cleaning up

Clean up spillage promptly. Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Gross spillages should be contained by use of sand or inert powder and disposed of according to the local regulations.

SECTION 7. HANDLING AND STORAGE

Handling

Avoid excessive inhalation of concentrated vapors. Follow good manufacturing practices for housekeeping and personal hygiene. Wash any exposed skin immediately after any chemical contact, before breaks and meals, and at the end of each work period. Contaminated clothing and shoes should be thoroughly cleaned before re-use.

If appropriate, procedures used during the handling of this material should also be used when cleaning equipment or removing residual chemicals from tanks or other containers, especially when steam or hot water is used, as this may increase vapor concentrations in the workplace air. Where chemicals are openly handled, access should be restricted to properly trained employees.

Keep all heated processes at the lowest necessary temperature in order to minimize emissions of volatile chemicals into the air.

Advice on protection against fire and explosion

Keep away from ignition sources and naked flame.

Requirements for storage areas and containers

Store in a cool, dry, ventilated area away from heat sources. Keep

containers upright and tightly closed when not in use.

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	Listed by	Value type	Exposure limit(s)
Cyclohexene, 1- methyl-4-(1- methylethenyl)-, Cyclohexene, 1- methyl-4-(1- methylethenyl)-, (4R)-, Cyclohexene, 1-methyl-4-(1- methyl-4-(1- methylethenyl)-, (4S)-	USA. Workplace Environmental Exposure Levels (WEEL)	8-hr TWA	30 ppm

Engineering measures

Engineering measures

: Where feasible, isolate mixing rooms and other areas where this material is used or openly handled. Maintain these areas under

negative air pressure relative to the rest of the plant.

Where feasible, use closed systems to transfer and process this

material

Personal protective equipment

Eye protection

: Use tight-fitting goggles, face shield or safety glasses with side

shields if eye contact might occur.

Hand protection

: Avoid skin contact. Use chemically resistant gloves.

Skin and body protection

: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Respiratory protection

: Use local exhaust ventilation around open tanks and other open sources of potential exposures in order to avoid excessive inhalation, including places where this material is openly weighed or measured.

In addition, use general dilution ventilation of the work area to

eliminate or reduce possible worker exposures.

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No respiratory protection is required during normal operations in a workplace where engineering controls such as adequate ventilation, etc. are sufficient.

If engineering controls and safe work practices are not sufficient, an approved, properly fitted respirator with organic vapor cartridges or canisters and particulate filters should be used:

a) while engineering controls and appropriate safe work practices and/or procedures are being implemented; or b) during short term maintenance procedures, when a rejective in the procedures are being implemented.

b)during short term maintenance procedures when engineering controls are not in normal operation or are not sufficient; or c)if normal operational workplace vapor concentration in the air is increased due to heat;

d)during emergencies; or

e)if engineering controls and operational practices are not sufficient to reduce airborne concentrations below an established occupational exposure limit.

Hygiene measures

To the extent deemed appropriate, implement pre-placement and regularly scheduled ascertainment of symptoms and spirometry testing of lung function for workers who are regularly exposed to this material.

To the extent deemed appropriate, use an experienced air sampling expert to identify and measure volatile chemicals that could be present in the workplace air to determine potential exposures and to ensure the continuing effectiveness of engineering controls and operational practices to minimize exposure.

Protective measures

: In December 2003, the National Institute for Occupational Safety and Health ("NIOSH") published an Alert on preventing lung disease in workers who use or make flavorings [NIOSH Publication Number 2004-110].

In August 2004, the United States Flavor and Extract Manufacturers Association (FEMA) issued a report entitled "Respiratory Safety in the Flavor Manufacturing Workplace".

Both of these reports provide recommendations for reducing employee exposure and for medical surveillance in the workplace. The recommendations in these reports are generally applicable to the use of any chemical in the workplace and you are strongly urged to review both of these reports.

The report published by FEMA also contains a list of "high priority"

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chemicals. If any of these chemicals are present in this product at a concentration >= 1.0% due to an intentional addition by IFF, the chemical(s) will be identified in this safety data sheet.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state

: liquid

Appearance

: CLEAR LIQUID

Color

: colorless to pale yellow

Odor

: conforms to standard

Safety data

Flash point

: 114.80 °F (46.00 °C)

Vapor pressure

: .13 hPa (0.13 hPa) Note: Calculated

Relative density (20 °C)

: 0.8590 - 0.8690

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid

: Remarks: Direct sources of heat.

Chemical stability

: Remarks: Presents no significant reactivity hazard, by itself or in contact with water. Avoid contact with strong acids, alkali or

oxidizing agents.

Hazardous decomposition products

: Note: Carbon monoxide and unidentified organic compounds may

be formed during combustion.

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SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

: Acute toxicity estimate

Dose: 2,426 mg/kg

Method: Calculation method

Acute oral toxicity (Component)

Component: 138-86-3

LD50 Rat

Dose: 5,300 mg/kg

Component: 470-82-6

LD50 Rat

Dose: 2,480 mg/kg Remarks: REACH data

Component: 586-62-9

LD50 Rat

Dose: 3,775 mg/kg

Method: OECD Test Guideline 401

Remarks: REACH data

Component: 99-86-5

LD50 Rat

Dose: 1,680 mg/kg Remarks: RIFM

Component: 99-87-6

LD50 Rat

Dose: 4,750 mg/kg

Component: 123-35-3

LD50 Mouse Dose: 2,000 mg/kg

Component: 555-10-2

LD50 Rat

Dose: 5,700 mg/kg Remarks: Other

Acute dermal toxicity

Acute toxicity estimate

Dose: > 5,000 mg/kg

Method: Calculation method

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Acute dermal toxicity

(Component)

Component: 138-86-3

LD50 Rabbit

Dose: > 5,000 mg/kg

Component: 470-82-6

LD50 Rabbit

Dose: > 5,000 mg/kg

Method: OECD Test Guideline 402

Remarks: REACH data

Component: 586-62-9

LD50 Rabbit

Dose: > 4,300 mg/kg

Method: OECD Test Guideline 402

Remarks: REACH data

Component: 99-87-6

LD50 Rabbit

Dose: > 5,000 mg/kg

Component: 123-35-3

LD50 Rabbit Dose: 5 g/kg

Method: OECD Test Guideline 402

Remarks: REACH data

Acute inhalation toxicity

Acute toxicity estimate

Exposure time: 4 h Dose: 136.36 mg/l

Method: Calculation method

Skin irritation (Component)

Component: 138-86-3

Rabbit

Result: Skin irritation Exposure time: 24 h Test substance:(undiluted)

human

Result: No skin irritation Method: closed patch test

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Exposure time: 48 h

Component: 470-82-6

Rabbit

Result: No skin irritation Exposure time: 24 h Remarks: REACH data

Component: 586-62-9

reconstructed human epidermis (RhE) Classification: No skin irritation Result: No skin irritation

Method: OECD Test Guideline 439

Remarks: REACH data

Component: 99-86-5

human

Result: No skin irritation Method: closed patch test Exposure time: 48 h

Component: 99-87-6_

human

Result: No skin irritation Method: closed patch test Exposure time: 48 h

Test substance: 4.0% in petrolatum

Rabbit

Result: Skin irritation Exposure time: 24 h

Component: 123-35-3

human

Classification: Irritating to skin.

Result: Skin irritation

Method: EPISKIN Human Skin Model Test

Exposure time: 15 min Remarks: REACH data

Eye irritation(Component)

Component: 470-82-6

Rabbit

Classification: No eye irritation

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Method: OECD Test Guideline 405

Remarks: REACH data

Component: 586-62-9

Rabbit

Classification: No eye irritation

Result: Eye irritation

Method: OECD Test Guideline 405

Remarks: REACH data

Component: 123-35-3

Rabbit

Classification: Irritating to eyes.

Result: Irritating to eyes.

Method: OECD Test Guideline 405

Exposure time: 8 d Remarks: REACH data

Sensitization

Classification: The product is a skin sensitizer, sub-category 1B.

Result: The product is a skin sensitizer, sub-category 1B.

Sensitization (Component)

Component: 138-86-3

LLNA Mouse

Result: Causes sensitization.

Test substance: 22% in ethanol/DEP (75:25)

maximisation study human Result: causes no sensitization Test substance: 20% in petrolatum

Component: 470-82-6 LLNA Mouse

Result: Skin Sensitizer Method: OECD 429 Remarks: REACH data

Component: 586-62-9

Local lymph node assay (LLNA) Mouse

Classification: The product is a skin sensitizer, sub-category 1B.

Result: The product is a skin sensitizer, sub-category 1B.

Method: OECD Test Guideline 429

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Remarks: REACH data

Component: 99-86-5 maximisation study human

Result: Did not cause sensitization on laboratory animals.

Test substance: 5% in petrolatum

Component: 99-87-6 maximisation study human

Result: Did not cause sensitization on laboratory animals.

Test substance: 4.0% in petrolatum

Component: 123-35-3

LLNA Mouse

Classification: Does not cause skin sensitization.

Result: Not a skin sensitizer.

Method: OECD 429 Remarks: REACH data

Repeated dose toxicity(Component)

Component: 138-86-3

Component: 470-82-6

Oral

NOEL: mg/kg bw

Method: OECD Test Guideline 407

Remarks: REACH data

Component: 586-62-9

OralRat

NOEL: 154.6 mg/kg

Method: OECD Test Guideline 422

Remarks: REACH data

Component: 99-86-5

Component: 99-87-6

Component: 123-35-3

OralRat

Method: OECD 408 Remarks: REACH data

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SECTION 12. ECOLOGICAL INFORMATION

Component:

138-86-3

Dipentene

Toxicity to fish:

LC50

Species:

Dose: 0.702 mg/l

Exposure time: 96 h

470-82-6

EUCALYPTOL

Toxicity to fish:

semi-static test

Species: Oncorhynchus mykiss (rainbow trout)

Dose: 57 mg/l

Exposure time: 96 h

Method:

REACH data

Toxicity to daphnia and other aquatic invertebrates:

static test EC50

Species: Daphnia magna (Water flea)

Dose: 100 mg/l Exposure time: 48 h REACH data Toxicity to algae:

static testEC50

Species: Pseudokirchneriella subcapitata (green algae)

Dose: 74 mg/l Exposure time: 96 h Analytical monitoring: yes

Method: OECD Test Guideline 201

REACH data

586-62-9

Terpinolene

Toxicity to fish:

LC50

Species: Danio rerio (zebra fish)

Dose: 0.805 mg/l Exposure time: 96 h Analytical monitoring: yes

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REACH data

Toxicity to daphnia and other aquatic invertebrates:

EC50

Species: Daphnia longispina (Water flea)

Dose: 0.634 mg/l Exposure time: 48 h Analytical monitoring: yes

Method: OECD Test Guideline 202

REACH data

Toxicity to algae:

99-87-6

CYMENE/PAR

Toxicity to daphnia and other aquatic invertebrates:

EC50

Species: Dose: 6.5 mg/l Exposure time: 48 h

123-35-3

MYRCENE

Toxicity to fish:

semi-static test LC50

Species: Cyprinus carpio (Carp)

Dose: 0.46 mg/l Exposure time: 96 h

Method: OECD Test Guideline 203

REACH data

Toxicity to daphnia and other aquatic invertebrates:

semi-static test

Species: Daphnia magna (Water flea)

Dose: 1.47 mg/l Exposure time: 48 h

Method: OECD Test Guideline 202

REACH data

<u>Toxicity to algae:</u>

static tes

Species: Pseudokirchneriella subcapitata (green algae)

Dose: 0.342 mg/l Exposure time: 76 h

Method: OECD Test Guideline 201

REACH data

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SECTION 13. DISPOSAL CONSIDERATIONS

Contaminated packaging

: Place material into sealed containers and dispose of in accordance

with local, state and federal regulations.

SECTION 14. TRANSPORT INFORMATION

DOT

Proper shipping name

DIPENTENE

Labels

3

UN number

2052

Class

3

Packing group

111

Emergency Response

Guidebook Number

: 128

IATA

UN number

: 2052

Description of the goods

: DIPENTENE

Class

: 3

Packing group

: 111

ICAO-Labels

: 3

IMDG

UN number

: 2052

Description of the goods

: DIPENTENE

Class

Packing group

: 111

IMDG-Labels

: 3

EmSNumber 1

: F-E

EmSNumber 2

: S-E

Marine pollutant

: yes

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SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards

Flammable (gases, aerosols, liquids, or solids)

Respiratory or skin sensitization

Reproductive toxicity Aspiration hazard

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Skin corrosion or irritation

Serious eye damage or eye irritation

Reportable Quantity

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HMIS Classification

: Health Hazard: 1

Chronic Health Hazard: /

Flammability: 2

Physical and chemical hazards: 0

SECTION 16. OTHER INFORMATION

Further information

The information in this MSDS was obtained from current and reliable sources. However the data is provided without any warrant, expressed or implied, regarding its correctness or accuracy. Since the use, handling, storage and disposal of this product are beyond IFF control, it is the responsibility of the user both to determine safe conditions for the use of this product and to assume liability of loss, damage, or expense arising out of the product's improper use. No warranty expressed or implied regarding the product described herein shall be created by or inferred from any statement or omission in this MSDS. Various Federal, State or Provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in this MSDS. The user should review these regulations to ensure full compliance.

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