

Safety Data Sheet

Isobionics® Natural α -Farnesene 95

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Version: 3.0

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(30833158/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Isobionics® Natural α -Farnesene 95

Recommended use of the chemical and restriction on use

Recommended use*: flavoring substance

Unsuitable for use: Any other use is not compliant.

Not intended for sale to or use by the general public.

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Synonyms: 2,6,10-Trimethyldodeca-2,6,9,11-tetraene

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Asp. Tox.	1	Aspiration hazard
Skin Sens.	1	Skin sensitization
Aquatic Acute	1	Hazardous to the aquatic environment - acute
Aquatic Chronic	1	Hazardous to the aquatic environment - chronic

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Label elements

Pictogram:



Signal Word:

Danger

Hazard Statement:

H317	May cause an allergic skin reaction.
H304	May be fatal if swallowed and enters airways.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280	Wear protective gloves.
P273	Avoid release to the environment.
P261	Avoid breathing mist or vapour or spray.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P333 + P313	If skin irritation or rash occurs: Get medical attention.
P391	Collect spillage.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P331	Do NOT induce vomiting.

Precautionary Statements (Storage):

P405	Store locked up.
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Precautionary Statements (Disposal):

P501	Dispose of contents/container in accordance with local regulations.
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Hazards not otherwise classified

When finely distributed on porous material, self-ignition is possible. Mop up spills with non-flammable adsorbents (e.g. vermiculite, spill mats). Soiled textiles / cleaning rags / adsorbents and Silica are capable of self ignition and should be wetted with water and must be disposed of in a safe manner. High risk of slipping due to leakage/spillage of product.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

1,3,6,10-Dodecatetraene, 3,7,11-trimethyl-, (3E,6E)-

CAS Number: 502-61-4

Content (W/W): 75.0 - 100.0%

Synonym: No data available.

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4. First-Aid Measures

Description of first aid measures

General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

If on skin:

Immediately wash thoroughly with soap and water, seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: coughing, wheezing, choking, dyspnea

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

water spray, foam, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:

water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon oxides, harmful vapours

The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

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Further information:

Do not spray water directly on fire, product will float and could be reignited on surface of water. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Cool endangered containers with water-spray.

6. Accidental release measures

Further accidental release measures:

When finely distributed on porous material, self-ignition is possible. High risk of slipping due to leakage/spillage of product.

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures, see section 8. Ensure adequate ventilation. Do not breathe vapour/spray. Avoid contact with the skin, eyes and clothing.

Environmental precautions

Do not discharge into drains/surface waters/groundwater. Inform authorities in the event of product spillage to water courses or sewage systems.

Methods and material for containment and cleaning up

For small amounts: Contain with absorbent material (e.g. sand, silica gel, acid binder, general purpose binder, sawdust).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Mop up spills with non-flammable adsorbents (e.g. vermiculite, spill mats). Soiled textiles / cleaning rags / adsorbents and Silica are capable of self ignition and should be wetted with water and must be disposed of in a safe manner.

7. Handling and Storage

Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Wear suitable protective clothing and eye/face protection. Avoid contact with the skin, eyes and clothing. Keep container tightly sealed.

Protection against fire and explosion:

Take precautionary measures against static discharges. Avoid all sources of ignition: heat, sparks, open flame. Soiled textiles / cleaning rags / adsorbents and Silica are capable of self ignition and should be wetted with water and must be disposed of in a safe manner.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

8. Exposure Controls/Personal Protection

No substance specific occupational exposure limits known.

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Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) respirator as necessary.

Hand protection:

Wear impermeable chemical resistant protective gloves.

Eye protection:

Tightly fitting safety goggles (chemical goggles) and face shield.

Body protection:

Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Avoid contact with skin. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

9. Physical and Chemical Properties

Form:	liquid, oily	
Odour:	slight odour, (fresh) green, flowery	
Colour:	colourless to slightly yellow	
	clear	
pH value:	not applicable, The substance does not dissociate.	
Melting point:	No data available.	
Freezing point:	No data available.	
Boiling point:	260 - 262 °C (1,013 hPa)	(measured)
	Literature data.	
Flash point:	116 °C The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.	(ASTM D93, closed cup)
Flammability:	hardly combustible	(derived from flash point)
Lower explosion limit:	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Autoignition:	237 °C The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.	(ASTM E659)

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Vapour pressure:	0.34 hPa (25 °C) The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.	
Density:	approx. 0.827 g/cm ³ (20 °C) 0.819 g/cm ³ (50 °C)	
Vapour density:	7.04 (20 °C) Heavier than air.	(calculated)
Partitioning coefficient n-octanol/water (log Pow):	7.10 (25 °C)	(calculated)
Self-ignition temperature:	Based on its structural properties the product is not classified as self-igniting.	
Thermal decomposition:	No data available.	
Viscosity, dynamic:	1.788 mPa.s (20 °C) The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.	(ASTM D 7042)
Viscosity, kinematic:	No data available.	
Particle size:	The substance / product is marketed or used in a non solid or granular form.	
Solubility in water:	insoluble	
Molar mass:	204.36 g/mol	

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water.
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Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

Self-ignition is possible when finely distributed on flammable surfaces in the presence of air.

Conditions to avoid

Avoid electro-static discharge. Avoid all sources of ignition: heat, sparks, open flame.

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Incompatible materials

dimethyl sulfoxide

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No data available.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Oral

Type of value: LD50

Species: rat (female)

Value: > 5,000 mg/kg (OECD Guideline 423)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. No mortality was observed.

Inhalation

Type of value: LC50

Species: rat (male/female)

Value: > 2.06 mg/l (OECD Guideline 403)

Exposure time: 4 h

An aerosol was tested.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. No mortality was observed.

Dermal

Type of value: LD50

Species: rabbit (male/female)

Value: > 5,000 mg/kg (other)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. No mortality was observed.

Assessment other acute effects

Assessment of STOT single:

No data available.

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Irritation / corrosion

Assessment of irritating effects: The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Not irritating to eyes and skin.

Skin

Species: rabbit

Result: non-irritant

Method: other

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Eye

Species: rabbit

Result: non-irritant

Method: other

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Sensitization

Assessment of sensitization: Sensitization after skin contact possible.

Species: non-animal method

Result: sensitizing

Method: OECD Guideline 442E

Species: non-animal method

Result: sensitizing

Method: OECD Guideline 442D

Aspiration Hazard

May also damage the lung at swallowing (aspiration hazard).

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Not classified, due to lack of data.

Genetic toxicity

Assessment of mutagenicity: Results from a number of mutagenicity studies with microorganisms are available. Taking into account all of the information, there is no indication that the substance is mutagenic. The substance was not mutagenic in mammalian cell culture. The substance was not genotoxic in mammalian cell culture.

Carcinogenicity

Assessment of carcinogenicity: Not classified, due to lack of data.

Reproductive toxicity

Assessment of reproduction toxicity: Not classified, due to lack of data.

Teratogenicity

Assessment of teratogenicity: Not classified, due to lack of data.

12. Ecological Information

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Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Very toxic (acute effect) to aquatic organisms.

Toxicity to fish

No data available.

Aquatic invertebrates

EC50 (48 h) 0.11 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The product has low solubility in the test medium. A saturated solution has been tested. The statement of the toxic effect relates to the analytically determined concentration.

Aquatic plants

No data available.

Chronic toxicity to fish

No data available.

Chronic toxicity to aquatic invertebrates

No data available.

Assessment of terrestrial toxicity

No data available concerning terrestrial toxicity.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

No data available.

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

Not readily biodegradable (by OECD criteria).

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Elimination information

46.3 % CO₂ formation relative to the theoretical value (60 d) (OECD Guideline 310) (aerobic, activated sludge)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Assessment of stability in water

According to structural properties, hydrolysis is not expected/probable.

Information on Stability in Water (Hydrolysis)

No data available.

Bioaccumulative potential

Bioaccumulation potential

No data available.

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Mobility in soil

Assessment transport between environmental compartments

The substance will rapidly evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is possible.

13. Disposal considerations

Waste disposal of substance:

Observe national and local legal requirements.

Container disposal:

Dispose of in accordance with national, state and local regulations.

14. Transport Information

Land transport

USDOT

Hazard class: 9

Packing group: III

ID number: UN 3082

Hazard label: 9, EHSM

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains 2,6,10-TRIMETHYLDODECA-2,6,9,11-TETRAENE)

Sea transport

IMDG

Hazard class: 9

Packing group: III

ID number: UN 3082

Hazard label: 9, EHSM

Marine pollutant: YES

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains 2,6,10-TRIMETHYLDODECA-2,6,9,11-TETRAENE)

Air transport

IATA/ICAO

Hazard class: 9

Packing group: III

ID number: UN 3082

Hazard label: 9, EHSM

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains 2,6,10-TRIMETHYLDODECA-2,6,9,11-TETRAENE)

15. Regulatory Information

Federal Regulations

Registration status:

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Chemical TSCA, US blocked / not listed

Food TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

NFPA Hazard codes:

Health: 2 Fire: 1 Reactivity: 0 Special:

HMIS III rating

Health: 2 Flammability: 1 Physical hazard: 0

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Asp. Tox.	1	Aspiration hazard
Aquatic Acute	1	Hazardous to the aquatic environment - acute
Aquatic Chronic	1	Hazardous to the aquatic environment - chronic
Skin Sens.	1	Skin sensitization

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2024/07/10

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Any other intended applications should be discussed with the manufacturer.
Corresponding occupational protection measurements must be followed.

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