

Printing date 01/16/2024 Reviewed on 01/16/2024

### 1 Identification

· Product identifier

· Trade name: 2,4-Decadienal natural

· Product number: 1123

· CAS Number: 2363-88-4

2363-88-4/25152-83-4

EC number: 219-114-9 219-114-9

· Application of the substance / the mixture Flavoring Ingredients

· Details of the supplier of the safety data sheet

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· Manufacturer/Supplier:

Advanced Biotech 10 Taft Road Totowa, NJ 07512 USA

Information department:

Product Safety Department productsafety@adv-bio.com

· Emergency telephone number:

Infotrac: 1-800-535-5053 (Domestic) & 1-352-323-3500 (International)

Email: responders@infotrac.net & During normal business hours: 1-973-339-6242

### 2 Hazard(s) identification

· Classification of the substance or mixture



GHS07

Acute Toxicity - Dermal 4 H312 Harmful in contact with skin.

Skin Irritation 2 H315 Causes skin irritation.

GHS label elements

Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible.

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



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# Safety Data Sheet acc. to OSHA HCS (29 CFR § 1910.1200)

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Trade name: 2,4-Decadienal natural

· Signal word Warning

Hazard-determining components of labeling:

2,4-Decadienal

· Hazard statements

H312 Harmful in contact with skin.

H315 Causes skin irritation.

· Precautionary statements

P280 Wear protective gloves / protective clothing. P312 Call a poison center/doctor if you feel unwell.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 1 Fire = 1 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 1 Fire = 1 Reactivity = 0

Other hazards

· Results of PBT and vPvB assessment

PBT: Not applicable.vPvB: Not applicable.

## 3 Composition/information on ingredients

· Chemical characterization: Substances

· CAS No. Description

CAS: 2363-88-4 2,4-Decadienal

· Identification number(s)

**EC number**: 219-114-9

### 4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.

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- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

### 5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:

CO2, powder or alcoholresistant foam.

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.

- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.
- · Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**Protective Action Criteria for Chemicals** 

· PAC-1:

Substance is not listed.

· PAC-2:

Substance is not listed.

· PAC-3:

Substance is not listed.

## 7 Handling and storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

No special requirements.

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Please refer to the product specification and/or Certificate of Analysis for product storage requirements.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

### 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as a basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Breathing equipment: Not required.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material should be based on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling.

### 9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Liquid

Color: According to product specification

Odor: According to product specification

· Odor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.

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Boiling point/Boiling range:	279-280 °C (534.2-536 °F) (@ 10 mm)			
Flash point:	107.2 °C (225 °F)			
Flammability (solid, gaseous):	Not applicable.			
Decomposition temperature:	Not determined.			
Ignition temperature:	Not determined.			
Danger of explosion:	Product does not present an explosion hazard.			
Explosion limits:				
Lower:	Not determined.			
Upper:	Not determined.			
Vapor pressure:	Not determined.			
Density at 20 °C (68 °F):	0.865-0.9 g/cm³ (7.21843-7.5105 lbs/gal)			
Specific Gravity	0.865-0.900 @ 20 °C (33.6-33.6 @ 68 °F)			
Relative density	Not determined.			
Vapor density	Not determined.			
Evaporation rate	Not determined.			
Solubility in / Miscibility with				
Water:	Not miscible or difficult to mix.			
Partition coefficient (n-octanol/wa	ater): Not determined.			
Viscosity:				
Dynamic:	Not determined.			
Kinematic:	Not determined.			
VOC content:	0.00 %			
	0.0 g/l / 0.00 lb/gal			
Other information	No further relevant information available.			

## 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50	values	that are	relevant for	classification:
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### **ATE (Acute Toxicity Estimate)**

Dermal LD50 1,100 mg/kg (ATE)

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### CAS: 2363-88-4 2,4-Decadienal

Dermal LD50 1,100 mg/kg (ATE)

- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

### 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 2 (Assessment by list): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

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14 Transport information	
· UN-Number · DOT, ADN, IMDG, IATA	Not Regulated
· UN proper shipping name · DOT, ADN, IMDG, IATA	Not Regulated
· Transport hazard class(es)	
· DOT, ADN, IMDG, IATA · Class	Not Regulated
· Packing group · DOT, IMDG, IATA	Not Regulated
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Not Regulated

## 15 Regulatory information

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

· Section 355	(extremely	/ hazard	lous su	bstances)	):
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Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

ACTIVE

· Hazardous Air Pollutants

Substance is not listed.

· Proposition 65

Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

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### · Carcinogenic categories

### · EPA (Environmental Protection Agency)

Substance is not listed.

#### TLV (Threshold Limit Value)

Substance is not listed.

### NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

### · GHS label elements

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The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS07

#### · Signal word Warning

### Hazard-determining components of labeling:

2.4-Decadienal

### · Hazard statements

H312 Harmful in contact with skin.

H315 Causes skin irritation.

### · Precautionary statements

P280 Wear protective gloves / protective clothing. P312 Call a poison center/doctor if you feel unwell.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse. P332+P313 If skin irritation occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### · Department issuing SDS: Product Safety Department

### · Contact:

Product Safety Department productsafety@adv-bio.com

### · Date of preparation / last revision 01/16/2024

#### Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

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CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, ÉU)

LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health TLV: Threshold Limit Value

PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

Acute Toxicity - Dermal 4: Acute toxicity - Category 4 Skin Irritation 2: Skin corrosion/irritation - Category 2 (Continuation of page 8)

US