

# Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 17.04.2025

Version number 1

Revision: 24.01.2025

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
  - **Trade name:** Nonanal 20% in Orange Oil natural
  - **Product number:** 1245
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**


No further relevant information available.
- **Application of the substance / the mixture** Flavoring Ingredients
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**


Advanced Biotech  
10 Taft Road  
Totowa, NJ 07512 USA
- **Further information obtainable from:**


Product Safety Department  
productsafety@adv-bio.com
- **1.4 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

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
  -  GHS02 flame  

Flam. Liq. 3      H226 Flammable liquid and vapour.
  -  GHS08 health hazard  

Asp. Tox. 1      H304 May be fatal if swallowed and enters airways.
  -  GHS09 environment  

Aquatic Chronic 2   H411 Toxic to aquatic life with long lasting effects.
  -  GHS07  

Skin Irrit. 2      H315 Causes skin irritation.  
Skin Sens. 1      H317 May cause an allergic skin reaction.
- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

# Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 17.04.2025

Version number 1

Revision: 24.01.2025

Trade name: Nonanal 20% in Orange Oil natural

(Contd. of page 1)

## Hazard pictograms



GHS02 GHS07 GHS08 GHS09

## Signal word Danger

## Hazard-determining components of labelling:

Orange oil

## Hazard statements

- H226 Flammable liquid and vapour.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H304 May be fatal if swallowed and enters airways.
- H411 Toxic to aquatic life with long lasting effects.

## Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
- P321 Specific treatment (see on this label).
- P331 Do NOT induce vomiting.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

## 2.3 Other hazards

## Results of PBT and vPvB assessment

- PBT: Not applicable.
- vPvB: Not applicable.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

**Description:** Mixture of substances listed below with nonhazardous additions.

### Dangerous components:

CAS: 8008-57-9 EC number: 307-891-8	Orange oil ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	50-100%
CAS: 124-19-6 EINECS: 204-688-5	Nonanal ⚠ Skin Irrit. 2, H315	10-25%

**Additional information:** For the wording of the listed hazard phrases refer to section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General information:** Immediately remove any clothing soiled by the product.

(Contd. on page 3)

## Safety data sheet

### according to Regulation (EC) No 1907/2006, Article 31

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Version number 1

Revision: 24.01.2025

**Trade name: Nonanal 20% in Orange Oil natural**

(Contd. of page 2)

- **After inhalation:**  
Supply fresh air and be sure to call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 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.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 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.  
Ensure adequate ventilation.
- **6.4 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.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.

(Contd. on page 4)

## Safety data sheet

### according to Regulation (EC) No 1907/2006, Article 31

Printing date 17.04.2025

Version number 1

Revision: 24.01.2025

**Trade name: Nonanal 20% in Orange Oil natural**

(Contd. of page 3)

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
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:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as a basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Hand protection**



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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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.

(Contd. on page 5)

# Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 17.04.2025

Version number 1

Revision: 24.01.2025

Trade name: Nonanal 20% in Orange Oil natural

(Contd. of page 4)

· Eye/face protection



Tightly sealed goggles

## SECTION 9: Physical and chemical properties

### · 9.1 Information on basic physical and chemical properties

#### · General Information

#### · Physical state

Liquid

#### · Colour:

According to product specification

#### · Odour:

According to product specification

#### · Odour threshold:

Not determined.

#### · Melting point/freezing point:

Undetermined.

#### · Boiling point or initial boiling point and boiling range

Undetermined.

#### · Flammability

Flammable.

#### · Lower and upper explosion limit

#### · Lower:

Not determined.

#### · Upper:

Not determined.

#### · Flash point:

<60 °C

#### · Decomposition temperature:

Not determined.

#### · pH

Not determined.

#### · Viscosity:

#### · Kinematic viscosity

Not determined.

#### · Dynamic:

Not determined.

#### · Solubility

#### · water:

Not miscible or difficult to mix.

#### · Partition coefficient n-octanol/water (log value)

Not determined.

#### · Vapour pressure:

Not determined.

#### · Density and/or relative density

#### · Density at 20 °C:

0.855 g/cm<sup>3</sup>

#### · Relative density

Not determined.

#### · Refractive Index

#### · Vapour density

Not determined.

### · 9.2 Other information

#### · Appearance:

#### · Form:

Liquid

#### · Important information on protection of health and environment, and on safety.

#### · Ignition temperature:

Product is not selfigniting.

#### · Explosive properties:

Not determined.

#### · Solvent content:

#### · VOC (EC)

0.00 %

#### · Change in condition

#### · Evaporation rate

Not determined.

(Contd. on page 6)

# Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 17.04.2025

Version number 1

Revision: 24.01.2025

Trade name: Nonanal 20% in Orange Oil natural

(Contd. of page 5)

## Information with regard to physical hazard classes

Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Flammable liquid and vapour.
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

## SECTION 10: Stability and reactivity

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

## SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- Acute toxicity Based on available data, the classification criteria are not met.
- Primary irritant effect:
- Skin corrosion/irritation Causes skin irritation.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation May cause an allergic skin reaction.
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard May be fatal if swallowed and enters airways.

(Contd. on page 7)

## Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 17.04.2025

Version number 1

Revision: 24.01.2025

**Trade name: Nonanal 20% in Orange Oil natural**

(Contd. of page 6)

· **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

### SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**

· **Remark:** Toxic for fish

· **Additional ecological information:**

· **General notes:**

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

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

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

### SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

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

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

· **14.1 UN number or ID number**

· **ADR, IMDG, IATA**

UN1197

· **14.2 UN proper shipping name**

· **ADR**

1197 EXTRACTS, LIQUID, ENVIRONMENTALLY  
HAZARDOUS

· **IMDG**

EXTRACTS, LIQUID, MARINE POLLUTANT

· **IATA**

Extracts, liquid

(Contd. on page 8)



# Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 17.04.2025

Version number 1

Revision: 24.01.2025

Trade name: Nonanal 20% in Orange Oil natural

(Contd. of page 7)

## 14.3 Transport hazard class(es)

### ADR



· Class 3 (F1) Flammable liquids.  
· Label 3

### IMDG



· Class 3 Flammable liquids.  
· Label 3

### IATA



· Class 3 Flammable liquids.  
· Label 3

## 14.4 Packing group

· ADR, IMDG, IATA III

## 14.5 Environmental hazards:

Product contains environmentally hazardous substances: Orange oil

### Marine pollutant:

Yes  
Symbol (fish and tree)

### Special marking (ADR):

Symbol (fish and tree)

## 14.6 Special precautions for user

Warning: Flammable liquids.

### Hazard identification number (Kemler code):

30

### EMS Number:

F-E,S-D

### Stowage Category

A

## 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

## Transport/Additional information:

### ADR

### Limited quantities (LQ)

5L

### Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

### Transport category

3

### Tunnel restriction code

D/E

(Contd. on page 9)



# Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 17.04.2025

Version number 1

Revision: 24.01.2025

Trade name: Nonanal 20% in Orange Oil natural

(Contd. of page 8)

<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<p>5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml</p>
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	<p>UN 1197 EXTRACTS, LIQUID, 3, III, ENVIRONMENTALLY HAZARDOUS</p>

## SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**



GHS02 GHS07 GHS08 GHS09

- **Signal word** Danger

- **Hazard-determining components of labelling:**

Orange oil

- **Hazard statements**

H226 Flammable liquid and vapour.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H304 May be fatal if swallowed and enters airways.  
H411 Toxic to aquatic life with long lasting effects.

- **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
P321 Specific treatment (see on this label).  
P331 Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Directive 2012/18/EU**

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

- **Seveso category**

E2 Hazardous to the Aquatic Environment  
P5c FLAMMABLE LIQUIDS

- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t

- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

(Contd. on page 10)

# Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 17.04.2025

Version number 1

Revision: 24.01.2025

**Trade name: Nonanal 20% in Orange Oil natural**

(Contd. of page 9)

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

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

## SECTION 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.

### · **Relevant phrases**

H226 Flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.

· **Department issuing SDS:** Product safety department

### · **Contact:**

Product Safety Department  
productsafety@adv-bio.com

· **Date of previous version:** 08.01.2025

### · **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  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Flam. Liq. 3: Flammable liquids – Category 3  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Skin Sens. 1: Skin sensitisation – Category 1  
Asp. Tox. 1: Aspiration hazard – Category 1  
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2