

Safety Data Sheet

according to Regulation (EC) No 1907/2006

NATURAL ALDEHYDE C-10 (DECANAL) 95%

Revision date: 28.02.2025

Product code: 236240

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

1.1. Product identifier

NATURAL ALDEHYDE C-10 (DECANAL) 95%

CAS No: 112-31-2

EC No: 203-957-4

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Manufacturing of: - Air care products - Perfumes, fragrances - Pharmaceuticals - Cosmetics, personal care products - Flavouring Substances - Other

1.3. Details of the supplier of the safety data sheet

Company name: Axxence Aromatic GmbH

Street: Tackenweide 28

Place: D-46446 Emmerich am Rhein

Telephone: + 49 2822 68561 0

Telefax: + 49 2822 68561 39

E-mail: info@axxence.com

Contact person: Safety Team

Telephone: + 49 2822 68561 0

E-mail: safety-documentation@axxence.com

Internet: www.axxence.de

Responsible Department: Safety Management

1.4. Emergency telephone number:

+49 2822 68561 99

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word: Warning

Pictograms:



Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

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This substance is not listed as Substance of Very High Concern (SVHC) in the Candidate List according to REACH, Article 59.

This substance is not identified as SVHC (substance of very high concern) and is not subject to authorisation according to Annex XIV of REACH.

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: C₁₀ H₂₀ O

Molecular weight: 156,27 g/mol

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)			100 %
	203-957-4			
	Eye Irrit. 2; H319			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
112-31-2	203-957-4	NATURAL ALDEHYDE C-10 (DECANAL)	100 %
	dermal: LD50 = >5000 mg/kg; oral: LD50 = >5000 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

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In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

No special measures are necessary.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Manufacturing of: - Air care products - Perfumes, fragrances - Pharmaceuticals - Cosmetics, personal care products - Flavouring Substances - Other

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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DNEL/DMEL values

CAS No	Name of agent			
DNEL type		Exposure route	Effect	Value
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)			
Worker DNEL, long-term		inhalation	systemic	24,86 mg/m³
Worker DNEL, acute		inhalation	systemic	49,71 mg/m³
Worker DNEL, long-term		inhalation	local	62,14 mg/m³
Worker DNEL, acute		inhalation	local	124,28 mg/m³
Worker DNEL, long-term		dermal	systemic	7,05 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	14,1 mg/kg bw/day
Worker DNEL, long-term		dermal	local	17,62 mg/cm²
Worker DNEL, acute		dermal	local	35,24 mg/cm²
Consumer DNEL, long-term		inhalation	systemic	6,13 mg/m³
Consumer DNEL, acute		inhalation	systemic	12,26 mg/m³
Consumer DNEL, long-term		inhalation	local	15,32 mg/m³
Consumer DNEL, acute		inhalation	local	30,65 mg/m³
Consumer DNEL, long-term		dermal	systemic	3,52 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	7,05 mg/kg bw/day
Consumer DNEL, long-term		dermal	local	8,81 mg/cm²
Consumer DNEL, acute		dermal	local	17,62 mg/cm²
Consumer DNEL, long-term		oral	systemic	3,52 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	7,05 mg/kg bw/day

PNEC values

CAS No	Name of agent	
Environmental compartment	Value	
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)	
Freshwater	0,00117 mg/l	
Freshwater (intermittent releases)	0,0117 mg/l	
Marine water	0,000117 mg/l	
Freshwater sediment	0,0972 mg/kg	
Marine sediment	0,00972 mg/kg	
Secondary poisoning	313 mg/kg	
Micro-organisms in sewage treatment plants (STP)	3,16 mg/l	
Soil	0,019 mg/kg	

8.2. Exposure controls



Individual protection measures, such as personal protective equipment

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Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	
Melting point/freezing point:	7 °C
Boiling point or initial boiling point and boiling range:	216 °C
Flammability:	not applicable
	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	85 °C
Auto-ignition temperature:	195 °C
Decomposition temperature:	not determined
pH-Value:	not determined
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	3,97
Vapour pressure:	0,08 hPa
(at 20 °C)	
Density (at 20 °C):	0,83 g/cm ³
Relative vapour density:	5,4
(at 20 °C)	

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

not explosive according to EU A.14

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

Not oxidising.

Other safety characteristics

Evaporation rate:

not determined

Solvent content:

0%

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Solid content:

0%

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

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.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)				
	oral	LD50 >5000 mg/kg	Rat	REACH Dossier	
	dermal	LD50 >5000 mg/kg	Rabbit	REACH Dossier	

Irritation and corrosivity

Serious eye damage/eye irritation: Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

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

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

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12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)					
	Acute fish toxicity	LC50 mg/l	1,45	96 h	Oncorhynchus mykiss (Rainbow trout)	REACH Dossier OECD 203
	Acute algae toxicity	ErC50	4,5 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Dossier OECD 201
	Acute crustacea toxicity	EC50 mg/l	1,17	48 h	Daphnia magna (Big water flea)	REACH Dossier OECD 202
	Acute bacteria toxicity	EC50	70 mg/l ()	3 h	Activated sludge	REACH Dossier OECD 209

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)			
	OECD 301F	50%	7	REACH Registration
	Readily biodegradable (according to OECD criteria).			
	OECD 301F	76%	21	REACH Registration
	Readily biodegradable (according to OECD criteria).			
	OECD 301F	82%	28	REACH Registration
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)	3,8

BCF

CAS No	Chemical name	BCF	Species	Source
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)	309		

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

The product has not been tested.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

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13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - used product

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

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EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

Directive 2004/42/EC on VOC in
paints and varnishes: 100 %

Information according to Directive
2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Abbreviations and acronyms

Eye Irrit: Eye irritation

ADR: Accord européen sur le transport 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 Harmonized 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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H319 Causes serious eye irritation.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.