

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 5/8/2024 Version: 1.0

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

1.1. Product identifier

Product form	: Substance
Substance name	: Aldehyde C9
IUPAC name	: Nonanal
EC-No.	: 204-688-5
CAS-No.	: 124-19-6
REACH registration No.	: 01-2119969440-35
Product code	: 23184
Product group	: Trade product

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

1.2.1. Relevant identified uses

Intended for general public Main use category Use of the substance/mixture

Professional use,Consumer use
 Fragrance raw material

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

De Hekserij Spoorstraat 57 8271 RG IJsselmuiden Nederland www.hekserij.nl

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or	mixture
Classification according to Regulation (EC)	No. 1272/2008 [CLP]
Hazardous to the aquatic environment – Chror Category 3 Full text of H- and EUH-statements: see section	
Adverse physicochemical, human health an Harmful to aquatic life with long lasting effects.	
2.2. Label elements	
Labelling according to Regulation (EC) No.	1272/2008 [CLP]
Signal word (CLP) Hazard statements (CLP) Precautionary statements (CLP)	 - H412 - Harmful to aquatic life with long lasting effects. P273 - Avoid release to the environment. P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

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SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type

: Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aldehyde C9	CAS-No.: 124-19-6 EC-No.: 204-688-5 REACH-no: 01-2119969440- 35	99 – 100	Aquatic Chronic 3, H412

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

3.2. Mixtures

Not applicable

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact First-aid measures after ingestion	 If you feel unwell, seek medical advice. Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Rinse eyes with water as a precaution. Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and eff	ects, both acute and delayed
Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion	 Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. None under normal conditions. None under normal conditions. None under normal conditions.

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 Unsuitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide.Do not use a heavy water stream.
5.2. Special hazards arising from the subst	tance or mixture
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	 No fire hazard. No direct explosion hazard. Toxic fumes may be released.
5.3. Advice for firefighters	
Firefighting instructions Protection during firefighting	 Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measur	res
6.1. Personal precautions, protective equip	ment and emergency procedures
General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
6.1.1. For non-emergency personnel	
Protective equipment Emergency procedures	: Wear recommended personal protective equipment. : Ventilate spillage area.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so.
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containment a	and cleaning up
For containment	: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section 13.	

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed Precautions for safe handling Hygiene measures	 Not expected to present a significant hazard under anticipated conditions of normal use. Ensure good ventilation of the work station. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, includ	ling any incompatibilities
Technical measures Storage conditions Packaging materials	 Keep in a cool, well-ventilated place away from heat. Keep cool. Protect from sunlight. Store always product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

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8.1.4. DNEL and PNEC	
Aldehyde C9 (124-19-6)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	7 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	24.9 mg/m ³
DNEL/DMEL (General population)	· · ·
Long-term - systemic effects,oral	3.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	6.1 mg/m ³
Long-term - systemic effects, dermal	3.5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	1.45 µg/l
PNEC aqua (marine water)	0.145 µg/l
PNEC aqua (intermittent, freshwater)	14.5 µg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.1056 mg/kg dwt
PNEC sediment (marine water)	10.56 µg/kg dw
PNEC (Soil)	
PNEC soil	20.22 µg/kg dw
PNEC (Oral)	
PNEC oral (secondary poisoning)	313 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	3.16 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment. Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

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Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Not available
Odour	: Not available
Odour threshold	: Not available
Melting point	: -18.8 °C
Freezing point	: Not available
Boiling point	: 194.85 °C Atm. press.: 101,325 kPa Decomposition: 'no'
Flammability	: Non flammable.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 76 °C Atm. press.: 101325 Pa
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
рН	: Not available
Viscosity, kinematic	: ≈ 1.154 mPa.s Temp.: 40 °C
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: 3.4
Vapour pressure	: 2 hPa Temp.: 20 °C
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as c	lefined in Regulation (EC) No 1272/2008
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	: Not classified : Not classified : Not classified
Aldehyde C9 (124-19-6)	
LD50 oral	> 5000 mg/kg
LD50 dermal	> 5000 mg/kg
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Aldehyde C9 (124-19-6)	
LOAEL (animal/female, F0/P)	1500 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:
LOAEL (animal/female, F1)	1500 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Aldehyde C9 (124-19-6)	
Viscosity, kinematic	≈ 1.154 mPa.s Temp.: 40 °C
11.2. Information on other hazards	

No additional information available

SECTION 12: Ecological information

12.1. Toxicity Ecology - general : Harmful to aquatic life with long lasting effects. Hazardous to the aquatic environment, short-term : Not classified (acute) Hazardous to the aquatic environment, long-term : Harmful to aquatic life with long lasting effects. (chronic) Aldehyde C9 (124-19-6) LC50 - Fish [1] 2.1 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) LC50 - Fish [2] 1.45 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)

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Aldehyde C9 (124-19-6)		
EC50 - Crustacea [1]	1.54 mg/l Test organisms (species): Daphnia magna	
12.2. Persistence and degradability		
Aldehyde C9 (124-19-6)		
Persistence and degradability	Not rapidly degradable	
12.3. Bioaccumulative potential		
Aldehyde C9 (124-19-6)		
Partition coefficient n-octanol/water (Log Kow)	3.4	
12.4. Mobility in soil		
No additional information available		
12.5. Results of PBT and vPvB assessment		
No additional information available		
12.6. Endocrine disrupting properties		
No additional information available		
12.7. Other adverse effects		
No additional information available		
SECTION 13: Disposal considerations		

13.1. Waste treatment methods	
Regional waste regulation Waste treatment methods Sewage disposal recommendations Product/Packaging disposal recommendations Additional information	 Disposal must be done according to official regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions. Disposal must be done according to official regulations. Disposal must be done according to official regulations. Do not re-use empty containers.

SECTION 14: Transport information

455			4.5.1	BID
ADR	IMDG	ΙΑΤΑ	ADN	RID
I4.1. UN number or ID n	umber			
Not regulated for transport				
14.2. UN proper shippin	g name			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard o	class(es)			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental haz	zards			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

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ADR	IMDG	ΙΑΤΑ	ADN	RID
No supplementary information available				
14.6. Special precautions for user				

Overland transport Not regulated

Not regulated

Transport by sea Not regulated

Air transport Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(c)	Aldehyde C9	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Dual-Use Regulation (428/2009)

Not listed on the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

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15.1.2. National regulations

Netherlands

SZW-lijst van kankerverwekkende stoffen	: The substance is not listed
SZW-lijst van mutagene stoffen	: The substance is not listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	: The substance is not listed
SZW-lijst van reprotoxische stoffen –	: The substance is not listed
Vruchtbaarheid	
SZW-lijst van reprotoxische stoffen – Ontwikkeling	: The substance is not listed

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	

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Abbreviations and acronyms:		
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:		
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
H412	412 Harmful to aquatic life with long lasting effects.	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.