

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol $\geq 99\%$, for synthesis

article number: **4151**

Version: **5.0 en**

Replaces version of: 2024-03-02

Version: (4)

date of compilation: 2015-11-06

Revision: 2024-07-08

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

1.1 Product identifier

Identification of the substance	1-Decanol $\geq 99\%$, for synthesis
Article number	4151
EC number	203-956-9
CAS number	112-30-1

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

Relevant identified uses:	Laboratory chemical Laboratory and analytical use
Uses advised against:	Do not use for private purposes (household). Food, drink and animal feedingstuffs.

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co. KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany

Telephone: +49 (0) 721 - 56 06 0

Telefax: +49 (0) 721 - 56 06 149

e-mail: sicherheit@carlroth.de

Website: www.carlroth.de

Competent person responsible for the safety data sheet: Department Health, Safety and Environment

e-mail (competent person): sicherheit@carlroth.de

1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Cat-egory	Hazard class and category	Hazard statement
3.3	Serious eye damage/eye irritation	2	Eye Irrit. 2	H319
4.1C	Hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol ≥99 %, for synthesis

article number: **4151**

2.2 Label elements

Labelling

Signal word

Warning

Pictograms

GHS07



Hazard statements

H319

Causes serious eye irritation

H412

Harmful to aquatic life with long lasting effects

Precautionary statements

Precautionary statements - prevention

P273

Avoid release to the environment

P280

Wear protective gloves/eye protection

Precautionary statements - response

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

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	1-Decanol
Molecular formula	C ₁₀ H ₂₂ O
Molar mass	158,3 g/mol
CAS No	112-30-1
EC No	203-956-9

Impurities/additives/constituents:

Name of substance	Identifier	Wt%
1-Dodecanol	CAS No 112-53-8 EC No 203-982-0	0,25 – < 1

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol $\geq 99\%$, for synthesis

article number: **4151**

Remarks

For full text of abbreviations: see SECTION 16

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air.

Following skin contact

Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Irritation

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings!
water spray, dry extinguishing powder, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible. Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Hazardous combustion products

In case of fire may be liberated: Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Do not allow firefighting water to enter drains or water courses. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

This information is not available.

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol $\geq 99\%$, for synthesis

article number: 4151

Human health values

Relevant DNELs and other threshold levels				
Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	176 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
DNEL	129 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
DNEL	250 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
DNEL	190 µg/cm ²	human, dermal	worker (industry)	chronic - local effects

Relevant DNELs of components						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
1-Dodecanol	112-53-8	DNEL	313 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
1-Dodecanol	112-53-8	DNEL	155 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
1-Dodecanol	112-53-8	DNEL	89 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Environmental values

Relevant PNECs and other threshold levels				
End-point	Threshold level	Organism	Environmental compartment	Exposure time
PNEC	3,2 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
PNEC	0,32 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
PNEC	0,021 mg/l	aquatic organisms	freshwater	short-term (single instance)
PNEC	0,002 mg/l	aquatic organisms	marine water	short-term (single instance)
PNEC	0,63 mg/kg	terrestrial organisms	soil	short-term (single instance)

Relevant PNECs of components						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
1-Dodecanol	112-53-8	PNEC	0,021 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
1-Dodecanol	112-53-8	PNEC	0,001 mg/l	aquatic organisms	freshwater	short-term (single instance)
1-Dodecanol	112-53-8	PNEC	0 mg/l	aquatic organisms	marine water	short-term (single instance)
1-Dodecanol	112-53-8	PNEC	0,666 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
1-Dodecanol	112-53-8	PNEC	0,067 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
1-Dodecanol	112-53-8	PNEC	0,132 mg/kg	terrestrial organisms	soil	short-term (single instance)

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol $\geq 99\%$, for synthesis

article number: **4151**

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

Skin protection



- **hand protection**

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. 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. The times are approximate values from measurements at 22 °C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

- **type of material**

NBR (Nitrile rubber)

- **material thickness**

$\geq 0,3$ mm

- **breakthrough times of the glove material**

>480 minutes (permeation: level 6)

- **other protection measures**

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C, colour code: Brown).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	characteristic
Melting point/freezing point	5 – 7 °C at 1.013 hPa

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol $\geq 99\%$, for synthesis

article number: 4151

Boiling point or initial boiling point and boiling range	220 – 235 °C at 1.013 hPa
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	0,9 vol% (LEL) - 5,7 vol% (UEL)
Flash point	95 °C at 1.013 hPa
Auto-ignition temperature	254 °C at 1.013 hPa (ECHA) (auto-ignition temperature (liquids and gases))
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	15,81 mm ² /s at 20 °C
Dynamic viscosity	14,1 mPa s at 20 °C

Solubility(ies)

Water solubility	0,0211 g/l at 20 °C (ECHA)
------------------	----------------------------

Partition coefficient

Partition coefficient n-octanol/water (log value):	4,5 (pH value: ~6, 25 °C) (ECHA)
Soil organic carbon/water (log KOC)	4,12

Vapour pressure	1 hPa at 20 °C
-----------------	----------------

Density and/or relative density

Density	0,83 g/cm ³ at 20 °C (ECHA)
Relative vapour density	5,46 (air = 1)

Particle characteristics	not relevant (liquid)
--------------------------	-----------------------

Other safety parameters

Oxidising properties	none
----------------------	------

9.2 Other information

Information with regard to physical hazard classes:	hazard classes acc. to GHS (physical hazards): not relevant
---	---

Other safety characteristics:

Surface tension	35,8 mN/m (22,5 °C) (ECHA)
Refractive index	1,437

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol $\geq 99\%$, for synthesis

article number: 4151

If heated

Vapours may form explosive mixtures with air.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser, Acetic anhydride, Acid chlorides, inorganic

10.4 Conditions to avoid

Keep away from heat.

10.5 Incompatible materials

Rubber articles, different plastics

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity					
Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	$>5.000 \text{ mg/kg}$	rat		ECHA
dermal	LD50	$>5.000 \text{ mg/kg}$	rat		ECHA

Acute toxicity of components					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
1-Dodecanol	112-53-8	oral	LD50	$>2.000 \text{ mg/kg}$	rat
1-Dodecanol	112-53-8	inhalation: dust/mist	LC50	$>71 \text{ mg/l/1h}$	rat
1-Dodecanol	112-53-8	dermal	LD50	8.000 mg/kg	rabbit

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol $\geq 99\%$, for synthesis

article number: 4151

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

gastrointestinal complaints

• If in eyes

Causes serious eye irritation

• If inhaled

vertigo, headache

• If on skin

Data are not available.

• Other information

none

11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

11.3 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life with long lasting effects.

Aquatic toxicity (acute)				
Endpoint	Value	Species	Source	Exposure time
LC50	2,4 mg/l	fish	ECHA	96 h
EC50	3,2 mg/l	aquatic invertebrates	ECHA	48 h
ErC50	2,7 mg/l	algae	ECHA	96 h

Aquatic toxicity (acute) of components					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
1-Dodecanol	112-53-8	LC50	1,01 mg/l	fish	96 h
1-Dodecanol	112-53-8	LL50	300 mg/l	fish	96 h
1-Dodecanol	112-53-8	EC50	0,765 mg/l	aquatic invertebrates	48 h
1-Dodecanol	112-53-8	EL50	<1 mg/l	aquatic invertebrates	48 h
1-Dodecanol	112-53-8	ErC50	0,66 mg/l	algae	72 h

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol $\geq 99\%$, for synthesis

article number: 4151

Aquatic toxicity (chronic)

Endpoint	Value	Species	Source	Exposure time
LC50	3,4 mg/l	fish	ECHA	120 h
NOEC	0,26 mg/l	fish	ECHA	33 d

Aquatic toxicity (chronic) of components

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
1-Dodecanol	112-53-8	LC50	3,4 mg/l	fish	120 h
1-Dodecanol	112-53-8	EC50	70,3 µg/l	aquatic invertebrates	21 d
1-Dodecanol	112-53-8	NOEC	0,26 mg/l	fish	33 d
1-Dodecanol	112-53-8	LOEC	0,54 mg/l	fish	33 d

12.2 Persistence and degradability

Theoretical Oxygen Demand: 3,032 mg/mg

Theoretical Carbon Dioxide: 2,78 mg/mg

Biodegradation

The substance is readily biodegradable.

Process of degradability

Process	Degradation rate	Time
biotic/abiotic	86 %	30 d
carbon dioxide generation	82,2 %	28 d
oxygen depletion	87 %	28 d

Degradability of components

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
1-Dodecanol	112-53-8	carbon dioxide generation	82,2 %	28 d		ECHA
1-Dodecanol	112-53-8	oxygen depletion	87 %	28 d		ECHA

12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

n-octanol/water (log KOW)	4,5 (pH value: ~6, 25 °C) (ECHA)
BCF	26

Bioaccumulative potential of components

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
1-Dodecanol	112-53-8		5,4 (pH value: 7,1, 23 °C)	

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol $\geq 99\%$, for synthesis

article number: 4151

12.4 Mobility in soil

The Organic Carbon normalised adsorption coefficient	4,12
--	------

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Properties of waste which render it hazardous

HP 4 irritant - skin irritation and eye damage

HP 14 ecotoxic

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number or ID number	not subject to transport regulations
14.2 UN proper shipping name	not assigned
14.3 Transport hazard class(es)	none
14.4 Packing group	not assigned
14.5 Environmental hazards	non-environmentally hazardous acc. to the dangerous goods regulations
14.6 Special precautions for user	There is no additional information.
14.7 Maritime transport in bulk according to IMO instruments	The cargo is not intended to be carried in bulk.

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol ≥99 %, for synthesis

article number: **4151**

14.8 Information for each of the UN Model Regulations

International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Seveso Directive

2012/18/EU (Seveso III)			
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
	not assigned		

Deco-Paint Directive

VOC content	100 %
VOC content	830 g/l

Industrial Emissions Directive (IED)

VOC content	100 %
VOC content	830 g/l

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

Water Framework Directive (WFD)

not listed

Regulation on the marketing and use of explosives precursors

not listed

Regulation on drug precursors

not listed

Regulation on substances that deplete the ozone layer (ODS)

not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

Regulation on persistent organic pollutants (POP)

not listed

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol ≥99 %, for synthesis

article number: 4151

National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list
not listed

Restrictions according to GB REACH, Annex 17

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
1-Decanol	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

Country	Inventory	Status
AU	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TR	CICR	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed (ACTIVE)
VN	NCI	substance is listed

Legend

AIIC	Australian Inventory of Industrial Chemicals
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NCI	National Chemical Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol $\geq 99\%$, for synthesis

article number: 4151

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.1		Classification acc. to GHS: change in the listing (table)	yes
2.2		Pictograms: change in the listing (table)	yes
2.2		Hazard statements: change in the listing (table)	yes
2.2		Precautionary statements - prevention: change in the listing (table)	yes
2.2		Precautionary statements - response: change in the listing (table)	yes
14.1	UN number or ID number	UN number or ID number: not subject to transport regulations	yes
14.1	ADRRID: UN 3082		yes
14.1	IMDG-Code: UN 3082		yes
14.1	ICAO-TI: UN 3082		yes
14.2	ADRRID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.		yes
14.2	IMDG-Code: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.		yes
14.2	ICAO-TI: Environmentally hazardous substance, liquid, n.o.s.		yes
14.2	Technical name: 1-Decanol		yes
14.3	ADRRID: 9		yes
14.3	IMDG-Code: 9		yes
14.3	ICAO-TI: 9		yes
14.4	ADRRID: III		yes
14.4	IMDG-Code: III		yes
14.4	ICAO-TI: III		yes
14.8	Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)Additional information		yes
14.8	Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.		yes

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol ≥99 %, for synthesis

article number: 4151

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
14.8	Particulars in the transport document: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (1-Decanol), 9, III, (-)		yes
14.8	Classification code: M6		yes
14.8	Danger label(s): 9, "Fish and tree"		yes
14.8		Danger label(s): change in the listing (table)	yes
14.8	Environmental hazards: yes (hazardous to the aquatic environment)		yes
14.8	Special provisions (SP): 274, 335, 375, 601		yes
14.8	Excepted quantities (EQ): E1		yes
14.8	Limited quantities (LQ): 5 L		yes
14.8	Transport category (TC): 3		yes
14.8	Tunnel restriction code (TRC): -		yes
14.8	Hazard identification No: 90		yes
14.8	Emergency Action Code: 3Z		yes
14.8	Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional information		yes
14.8	Classification code: M6		yes
14.8	Danger label(s): 9, "Fish and tree"		yes
14.8		Danger label(s): change in the listing (table)	yes
14.8	Environmental hazards: Yes Hazardous to water		yes
14.8	Special provisions (SP): 274, 335, 375, 601		yes
14.8	Excepted quantities (EQ): E1		yes
14.8	Limited quantities (LQ): 5 L		yes
14.8	Transport category (TC): 3		yes
14.8	Hazard identification No: 90		yes
14.8	Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.		yes
14.8	Particulars in the shipper's declaration:		yes

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol ≥99 %, for synthesis

article number: 4151

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (1-Decanol), 9, III		
14.8	Marine pollutant: yes (hazardous to the aquatic environment), (1-Decanol)		yes
14.8	Danger label(s): 9, "Fish and tree"		yes
14.8		Danger label(s): change in the listing (table)	yes
14.8	Special provisions (SP): 274, 335, 969		yes
14.8	Excepted quantities (EQ): E1		yes
14.8	Limited quantities (LQ): 5 L		yes
14.8	EmS: F-A, S-F		yes
14.8	Stowage category: A		yes
14.8	Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.		yes
14.8	Particulars in the shipper's declaration: UN3082, Environmentally hazardous substance, liquid, n.o.s., (1-Decanol), 9, III		yes
14.8	Environmental hazards: yes (hazardous to the aquatic environment)		yes
14.8	Danger label(s): 9, "Fish and tree"		yes
14.8		Danger label(s): change in the listing (table)	yes
14.8	Special provisions (SP): A97, A158, A197, A215		yes
14.8	Excepted quantities (EQ): E1		yes
14.8	Limited quantities (LQ): 30 kg		yes
14.2	UN proper shipping name	UN proper shipping name: not assigned	yes
14.3	Transport hazard class(es)	Transport hazard class(es): none	yes
14.4	Packing group	Packing group: not assigned	yes
14.5	Environmental hazards: hazardous to the aquatic environment	Environmental hazards: non-environmentally hazardous acc. to the dangerous goods regulations	yes
14.6	Special precautions for user: Provisions for dangerous goods (ADR) should be complied within the premises.	Special precautions for user: There is no additional information.	yes
14.8	International Maritime Dangerous Goods Code (IMDG) - Additional information	International Maritime Dangerous Goods Code (IMDG) - Additional information: Not subject to IMDG.	yes

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol ≥99 %, for synthesis

article number: 4151

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
14.8	International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information	International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information: Not subject to ICAO-IATA.	yes
15.1		2012/18/EU (Seveso III): change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
ELINCS	European List of Notified Chemical Substances
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LEL	Lower explosion limit (LEL)
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
LOEC	Lowest Observed Effect Concentration
log KOW	n-Octanol/water

Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



1-Decanol $\geq 99\%$, for synthesis

article number: 4151

Abbr.	Descriptions of used abbreviations
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
UEL	Upper explosion limit (UEL)
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.