

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**1-Decanol > 98 % (n-Decanol) for synthesis**

Revision date: 17.07.2023

Product code: 23061

Page 1 of 11

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

1-Decanol &gt; 98 % (n-Decanol) for synthesis

CAS No: 112-30-1  
EC No: 203-956-9**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

**Uses advised against**

Do not use for private purposes (household).

**1.3. Details of the supplier of the safety data sheet**

Company name:	AnalytiChem GmbH	
Street:	Stempelstraße 6	
Place:	D-47167 Duisburg	
Telephone:	0203/5194-0	Telefax: 0203/5194-290
E-mail:	info@analytichem.de	
Contact person:	Abteilung Produktsicherheit	Telephone: 0203/5194-107/117
E-mail:	produktsicherheit@analytichem.de	
Internet:	www.analytichem.de	
Responsible Department:	Abteilung Produktsicherheit	

**1.4. Emergency telephone number:**

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

**Further Information**

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

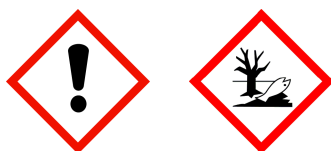
**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**Skin Irrit. 2; H315  
Eye Irrit. 2; H319  
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****Regulation (EC) No 1272/2008**

Signal word: Warning

Pictograms:

**Hazard statements**

H315 Causes skin irritation.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 1-Decanol > 98 % (n-Decanol) for synthesis

Revision date: 17.07.2023

Product code: 23061

Page 2 of 11

H319 Causes serious eye irritation.  
H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
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.  
P391 Collect spillage.

#### 2.3. Other hazards

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Sum formula: CH<sub>3</sub>(CH<sub>2</sub>)<sub>9</sub>OH  
Molecular weight: 158,28 g/mol

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
112-30-1	decan-1-ol			100 %
	203-956-9			
	Skin Irrit. 2, Eye Irrit. 2, Aquatic Chronic 2; H315 H319 H411			

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	
112-30-1	203-956-9	decan-1-ol	100 %
	dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg		

#### Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

No data available

##### After inhalation

Provide fresh air.

##### After contact with skin

Wash immediately with: Water  
Take off immediately all contaminated clothing and wash it before reuse.

##### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.  
Remove contact lenses, if present and easy to do. Continue rinsing.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 1-Decanol > 98 % (n-Decanol) for synthesis

Revision date: 17.07.2023

Product code: 23061

Page 3 of 11

#### After ingestion

Observe risk of aspiration if vomiting occurs.  
Call a physician immediately.

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

Anaesthetic state  
Cough  
Dyspnoea  
Headache  
Unconsciousness  
Dizziness  
Irritant

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

No data available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>)  
Foam  
Extinguishing powder

#### Unsuitable extinguishing media

no restriction

### 5.2. Special hazards arising from the substance or mixture

Combustible liquids  
Hazardous combustion products  
In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>) Carbon monoxide  
In case of warming:  
Vapours are heavier than air, spread along floors and form explosive mixtures with air.  
Heating causes rise in pressure with risk of bursting.

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.  
In case of fire and/or explosion do not breathe fumes.  
Avoid contact with skin, eyes and clothes.

#### Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.  
Move undamaged containers from immediate hazard area if it can be done safely.  
Use water spray jet to protect personnel and to cool endangered containers.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Provide adequate ventilation.  
Use personal protection equipment.  
Avoid contact with skin, eyes and clothes.  
Remove persons to safety.  
Emergency procedures  
Do not breathe dust/fume/gas/mist/vapours/spray.

#### For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 1-Decanol > 98 % (n-Decanol) for synthesis

Revision date: 17.07.2023

Product code: 23061

Page 4 of 11

#### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

#### **6.3. Methods and material for containment and cleaning up**

##### **For containment**

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

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

##### **For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

##### **Other information**

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

#### **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**

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Keep container tightly closed.

Use personal protection equipment. Use extractor hood (laboratory).

Do not breathe vapour/aerosol. Provide adequate ventilation.

##### **Advice on protection against fire and explosion**

In case of warning:

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

##### **Advice on general occupational hygiene**

Keep away from food, drink and animal feedingstuffs.

Wash hands and face before breaks and after work and take a shower if necessary.

When using do not eat or drink.

Avoid: aerosol or mist formation Do not breathe vapour/aerosol.

##### **Further information on handling**

Take off immediately all contaminated clothing and wash it before reuse.

Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. If handled uncovered, arrangements with local exhaust ventilation have to be used.

#### **7.2. Conditions for safe storage, including any incompatibilities**

##### **Requirements for storage rooms and vessels**

Keep container tightly closed.

##### **Further information on storage conditions**

Protect from sunlight.

storage temperature < +30°C

#### **7.3. Specific end use(s)**

Laboratory chemicals

## **SECTION 8: Exposure controls/personal protection**

#### **8.1. Control parameters**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 1-Decanol > 98 % (n-Decanol) for synthesis

Revision date: 17.07.2023

Product code: 23061

Page 5 of 11

#### DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
112-30-1	decan-1-ol		
Worker DNEL, long-term	inhalation	systemic	176 mg/m <sup>3</sup>
Worker DNEL, long-term	inhalation	local	129 mg/m <sup>3</sup>
Worker DNEL, long-term	dermal	systemic	250 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	43,5 mg/m <sup>3</sup>
Consumer DNEL, long-term	dermal	systemic	125 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	12,5 mg/kg bw/day

#### PNEC values

CAS No	Substance	
Environmental compartment	Value	
112-30-1	decan-1-ol	
Freshwater	0,042 mg/l	
Freshwater (intermittent releases)	0,08 mg/l	
Marine water	0,004 mg/l	
Freshwater sediment	7 mg/kg	
Marine sediment	0,7 mg/kg	
Micro-organisms in sewage treatment plants (STP)	1,5 mg/l	
Soil	1,27 mg/kg	

#### 8.2. Exposure controls

##### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

##### Individual protection measures, such as personal protective equipment

##### Eye/face protection

goggles

Face protection umbrella

##### 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.

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) With specification (test according to EN374):

By long-term hand contact

Trade name/designation KCL 730 Camatril® Velours

Suitable material: NBR (Nitrile rubber) 0,4 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation KCL 720 Camapren®

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 1-Decanol > 98 % (n-Decanol) for synthesis

Revision date: 17.07.2023

Product code: 23061

Page 6 of 11

Suitable material: CR (polychloroprene, chloroprene rubber) 0,65 mm  
Wearing time with occasional contact (splashes): > 240 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet (>, <) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

#### Skin protection

Wear fire resistant or flame retardant clothing.  
Take off immediately all contaminated clothing and wash it before reuse.  
Wear suitable protective clothing. Take off immediately all contaminated clothing.  
Wash hands and face before breaks and after work and take a shower if necessary.

#### Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.  
Filtering device with filter or ventilator filtering device of type: A

#### Environmental exposure controls

Do not allow to enter into surface water or drains.  
Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.  
Danger of explosion

## SECTION 9: Physical and chemical properties

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

Physical state:	Liquid	
Colour:	colourless	
Odour:	like: Hydrocarbons, aromatic	
Odour threshold:	No data available	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and boiling range:		220-235 °C
Flammability:		No data available
Lower explosion limits:		0,9 vol. %
Upper explosion limits:		5,7 vol. %
Flash point:		95 °C
Auto-ignition temperature:		254 °C
Decomposition temperature:		No data available
pH-Value:		No data available
Viscosity / kinematic:		No data available
Water solubility: (at 20 °C)		0,02 g/L
Solubility in other solvents		No data available
Dissolution rate:		No data available
Partition coefficient n-octanol/water:		No data available
Dispersion stability:		No data available
Vapour pressure: (at 20 °C)		<0,1 hPa
Vapour pressure:		No data available
Density:		0,8 g/cm <sup>3</sup>
Relative density:		No data available
Bulk density:		No data available
Relative vapour density:		No data available

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 1-Decanol > 98 % (n-Decanol) for synthesis

Revision date: 17.07.2023

Product code: 23061

Page 7 of 11

Particle characteristics: No data available

#### **9.2. Other information**

##### **Information with regard to physical hazard classes**

Explosive properties

In case of warming:

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

Sustaining combustion:

Sustaining combustion

Self-ignition temperature

Solid:

No data available

Gas:

No data available

Oxidizing properties

No data available

##### **Other safety characteristics**

Evaporation rate:

No data available

Solvent separation test:

No data available

Solvent content:

100%

Solid content:

No data available

Sublimation point:

No data available

Softening point:

No data available

Pour point:

No data available

Viscosity / dynamic:

14,1 mPa·s

(at 20 °C)

Flow time:

No data available

##### **Further Information**

No data available

## SECTION 10: Stability and reactivity

### **10.1. Reactivity**

In case of warming:

Vapours may form explosive mixtures with air.

### **10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

### **10.3. Possibility of hazardous reactions**

Oxidising agent

Acetic anhydride Acid chlorides, inorganic

### **10.4. Conditions to avoid**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### **10.5. Incompatible materials**

Plastic articles

Rubber articles

### **10.6. Hazardous decomposition products**

SECTION 5: Firefighting measures

##### **Further information**

No data available

## SECTION 11: Toxicological information

### **11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**1-Decanol > 98 % (n-Decanol) for synthesis**

Revision date: 17.07.2023

Product code: 23061

Page 8 of 11

**Toxicokinetics, metabolism and distribution**

No data available

**Acute toxicity**

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-30-1	decan-1-ol				
	oral	LD50 > 5000 mg/kg	Rat	Study report (2008)	EPA OPPTS 870.1100
	dermal	LD50 > 5000 mg/kg	Rat	Study report (2009)	EPA OPPTS 870.1200

**Irritation and corrosivity**

Causes skin irritation.

Causes serious eye irritation.

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

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.

**Information on likely routes of exposure**

No data available

**Specific effects in experiment on an animal**

No data available

**Additional information on tests**

No data available

**Practical experience**

No data available

**11.2. Information on other hazards**

**Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

**Further information**

Anaesthetic state

Cough

Dyspnoea

Headache

Unconsciousness

Dizziness

Dizziness

Irritant

**SECTION 12: Ecological information**

**12.1. Toxicity**



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**1-Decanol > 98 % (n-Decanol) for synthesis**

Revision date: 17.07.2023

Product code: 23061

Page 9 of 11

Toxic to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
112-30-1	decan-1-ol					
	Acute fish toxicity	LC50 > 4,2 - 5,6 mg/l	96 h	Salmo gairdneri	Study report (1975)	EPA OPP 72-1
	Acute algae toxicity	ErC50 1,5 mg/l	72 h	Green algae	QPRF (2015)	Validation set derived from 48-hour to 7
	Acute crustacea toxicity	EC50 6,5 mg/l	48 h	Daphnia magna	Study report (1976)	other: USEPA 1975
	Fish toxicity	NOEC 0,26 mg/l	33 d	Pimephales promelas	Study report (2015)	OECD Guideline 210
	Crustacea toxicity	NOEC 0,11 mg/l	21 d	Daphnia magna	Study report (2005)	OECD Guideline 211

**12.2. Persistence and degradability**

86 %; 30 d  
OECD 301D  
Readily biodegradable (according to OECD criteria).

**12.3. Bioaccumulative potential**

Bioaccumulative potential

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
112-30-1	decan-1-ol	4,5

**BCF**

CAS No	Chemical name	BCF	Species	Source
112-30-1	decan-1-ol	20		(2010)

**12.4. Mobility in soil**

No data available

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

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

**12.6. Endocrine disrupting properties**

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

**12.7. Other adverse effects**

Avoid release to the environment.

**Further information**

Do not allow to enter into surface water or drains.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.  
Send to a physico-chemical treatment facility under observation of official regulations.  
Do not empty into drains.

**Contaminated packaging**

Handle contaminated packages in the same way as the substance itself.  
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**1-Decanol > 98 % (n-Decanol) for synthesis**

Revision date: 17.07.2023

Product code: 23061

Page 10 of 11

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number or ID number:** UN 3082  
**14.2. UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (decan-1-ol)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** III  
 Hazard label: 9  
 Classification code: M6  
 Special Provisions: 274 335 375 601  
 Limited quantity: 5 L  
 Excepted quantity: E1  
 Transport category: 3  
 Hazard No: 90  
 Tunnel restriction code: -

**Inland waterways transport (ADN)**

**14.1. UN number or ID number:** UN 3082  
**14.2. UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (decan-1-ol)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** III  
 Hazard label: 9  
 Classification code: M6  
 Special Provisions: 274 335 375 601  
 Limited quantity: 5 L  
 Excepted quantity: E1

**Marine transport (IMDG)**

**14.1. UN number or ID number:** UN 3082  
**14.2. UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (decan-1-ol)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** III  
 Hazard label: 9  
 Special Provisions: 274, 335, 969  
 Limited quantity: 5 L  
 Excepted quantity: E1  
 EmS: F-A, S-F

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** UN 3082  
**14.2. UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (decan-1-ol)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** III  
 Hazard label: 9  
 Special Provisions: A97 A158 A197  
 Limited quantity Passenger: 30 kg G  
 Passenger LQ: Y964  
 Excepted quantity: E1  
 IATA-packing instructions - Passenger: 964  
 IATA-max. quantity - Passenger: 450 L  
 IATA-packing instructions - Cargo: 964  
 IATA-max. quantity - Cargo: 450 L

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 1-Decanol > 98 % (n-Decanol) for synthesis

Revision date: 17.07.2023

Product code: 23061

Page 11 of 11

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes  
Danger releasing substance: decan-1-ol

### SECTION 15: Regulatory information

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

##### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

Information according to 2012/18/EU (SEVESO III): E2 Hazardous to the Aquatic Environment

##### 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): 1 - slightly hazardous to water

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 11,12.

#### Abbreviations and acronyms

Skin Irrit: Skin irritation

Eye Irrit: Eye irritation

Aquatic Chronic: Chronic aquatic hazard

#### Relevant H and EUH statements (number and full text)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

#### Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. 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.