

# **SAFETY DATA SHEET**

Creation Date 19-Aug-2010 Revision Date 28-Dec-2021 Revision Number 5

1. Identification

Product Name Decane

Cat No.: AC434600000; AC434600010; AC434601000

CAS No 124-18-5 Synonyms n-Decane.

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
Fair Lawn, NJ 07410

Tel: (201) 796-7100

Emergency Telephone Number For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11

Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99 **CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

# 2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Category 3
Aspiration Toxicity Category 1

Label Elements

**Signal Word** 

Danger

**Hazard Statements** 

Flammable liquid and vapor

May be fatal if swallowed and enters airways



#### **Precautionary Statements**

#### Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep cool

**Disposal** 

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Repeated exposure may cause skin dryness or cracking

# 3. Composition/Information on Ingredients

Component	CAS No	Weight %		
Decane	124-18-5	>95		

### 4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

Inhalation Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the

substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention immediately if symptoms occur. Risk of serious damage to the lungs (by aspiration). If not breathing, give

artificial respiration.

**Ingestion** Do NOT induce vomiting. Call a physician or poison control center immediately. If vomiting

occurs naturally, have victim lean forward.

Most important symptoms and

effects

**Notes to Physician** 

Difficulty in breathing. Irritating to eyes. May cause skin irritation and/or dermatitis.

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Treat symptomatically

### 5. Fire-fighting measures

Suitable Extinguishing Media CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam. Water mist may be used to cool

closed containers.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire

**Flash Point** 46 °C / 114.8 °F

Method - No information available

Autoignition Temperature 210 °C / 410 °F

**Explosion Limits** 

 Upper
 5.4 vol %

 Lower
 0.7 vol %

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

#### Specific Hazards Arising from the Chemical

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO2).

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

Health	Flammability	Instability	Physical hazards
3	2	0	N/A

#### 6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Ensure adequate ventilation. Remove all

sources of ignition. Take precautionary measures against static discharges. Avoid contact

with skin and eyes.

Environmental Precautions Should not be released into the environment. See Section 12 for additional Ecological

Information. Do not flush into surface water or sanitary sewer system.

**Methods for Containment and Clean** Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. **Up**Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

### 7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Keep away from open

flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static

discharges.

**Storage.** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from

heat, sparks and flame. Flammables area. Incompatible Materials. Strong oxidizing

agents.

### 8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location. Use explosion-proof

electrical/ventilating/lighting equipment.

Personal Protective Equipment

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

**Skin and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** No protective equipment is needed under normal use conditions.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

### 9. Physical and chemical properties

Physical State Liquid
Appearance Colorless

Odor Petroleum distillates
Odor Threshold No information available

pH Not applicable

Melting Point/Range -30 °C / -22 °F

Boiling Point/Range 174  $^{\circ}$ C / 345.2  $^{\circ}$ F @ 760 mmHg

Flash Point 46 °C / 114.8 °F
Evaporation Rate No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

 Upper
 5.4 vol %

 Lower
 0.7 vol %

Vapor PressureNo information availableVapor DensityNo information available

Specific Gravity0.735SolubilityImmisciblePartition coefficient; n-octanol/waterNo data availableAutoignition Temperature210 °C / 410 °FDecomposition TemperatureNo information availableViscosityNo information availableMalocular FormulaC10 H32

Molecular Formula C10 H22 Molecular Weight 142.28

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Keep away from open flames, hot surfaces and

sources of ignition.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

Hazardous Polymerization Hazardous polymerization does not occur.

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**Decane** 

**Hazardous Reactions** 

None under normal processing.

# 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

**Component Information** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Decane	>5000 mg/kg (Rat)	>5000 mg/kg (Rabbit)	72.3 mg/L/4h (Mouse)	

**Toxicologically Synergistic** 

No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

No information available Sensitization

The table below indicates whether each agency has listed any ingredient as a carcinogen. Carcinogenicity

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Decane	124-18-5	Not listed				

No information available **Mutagenic Effects** 

**Reproductive Effects** No information available.

No information available. **Developmental Effects** 

No information available. **Teratogenicity** 

STOT - single exposure None known STOT - repeated exposure None known

**Aspiration hazard** Category 1

delayed

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

**Endocrine Disruptor Information** No information available

Tumorigenic effects have been reported in experimental animals. The toxicological Other Adverse Effects

properties have not been fully investigated.

# 12. Ecological information

#### **Ecotoxicity**

Do not empty into drains. Contains a substance which is:. Very toxic to aquatic organisms. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Decane	Not listed	Not listed	Not listed	EC50: = 0.029 mg/L, 48h
				(Daphnia magna)

Persistence and Degradability Insoluble in water May persist based on information available. Immiscible with water

**Bioaccumulation/ Accumulation** No information available.

**Mobility** . Is not likely mobile in the environment due its low water solubility.

Component	log Pow
Decane	5.1

### 13. Disposal considerations

**Waste Disposal Methods** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

DOT

UN-No UN2247
Proper Shipping Name N-DECANE

Hazard Class 3
Packing Group III

TDG

UN-No UN2247
Proper Shipping Name UN2247
N-DECANE

Hazard Class 3
Packing Group III

<u>IATA</u>

UN-No UN2247
Proper Shipping Name UN2247
n-DECANE

Hazard Class 3
Packing Group III

IMDG/IMO

UN-No UN2247
Proper Shipping Name N-DECANE

Hazard Class 3
Packing Group III

# 15. Regulatory information

#### **United States of America Inventory**

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Decane	124-18-5	Χ	ACTIVE	-

#### Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

### **International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Decane	124-18-5	Х	-	204-686-4	Χ	Χ	Χ	Χ	Х	KE-09400

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

**OSHA** - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

# U.S. State Right-to-Know

Regulations

Component	Component Massachusetts		Pennsylvania	Illinois	Rhode Island	
Decane	-	X	X	-	X	

#### **U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

**U.S. Department of Homeland** 

Component

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

CAS No

Authorisation/Restrictions according to EU REACH

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

·			Pollutant	Potential	Hazardous Substances (RoHS)
Decane	124-18-5	Listed	Not applicable	Not applicable	Not applicable
Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Decane	124-18-5	Not applicable	Not applicable	Not applicable	Not applicable

# 16. Other information

Prepared By Regulatory Affairs

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OECD HPV

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Revision Summary

This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Restriction of

Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer** 

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**