

1. Identification

Product identifier	Capric Alcohol	
Other means of identification		
Catalog number	1091028	
Chemical name	Decan-1-ol	
Synonym(s)	1-Decanol * n-Decanol	
Recommended use	Specified quality tests and assay use only.	
Recommended restrictions	Not for use as a drug. Not for administration to humans or animals.	
Manufacturer/Importer/Supplier/Distributor information		
Company name	U. S. Pharmacopeia	
Address	12601 Twinbrook Parkway Rockville MD 20852-1790 US	
Telephone	RS Technical Services	301-816-8129
Website	www.usp.org	
E-mail	RSTECH@usp.org	
Emergency phone number	CHEMTREC within US & Canada	1-800-424-9300
	CHEMTREC outside US & Canada	+1 703-527-3887

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 4
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Aspiration hazard	Category 1
OSHA hazard(s)	Not classified.	

Label elements



Signal word	Danger	
Hazard statement	Combustible liquid. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation.	
Precautionary statement		
Prevention	Keep away from flames and hot surfaces-No smoking. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection.	
Response	Do NOT induce vomiting. If swallowed: Immediately call a poison center/doctor/medical professional. If on skin: Wash with plenty of water/soap. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use suitable media for extinction.	
Storage	Store in a well-ventilated place. Keep cool. Store locked up.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Hazard(s) not otherwise classified (HNOC)	Not classified.	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1

Supplemental information

Hazard statement Very toxic to aquatic life.

Precautionary statement

Prevention	Avoid release to the environment.
Response	Collect spillage.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Substance

Hazardous components

Chemical name	Common name and synonyms	CAS number	%
Capric Alcohol	1-Decanol n-Decanol	112-30-1	100

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing. Wash off with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Aspiration may cause pulmonary edema and pneumonitis.
Most important symptoms/effects, acute and delayed	Irritation of eyes, skin, and mucous membranes.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Administer activated charcoal as a slurry. Maintain an adequate airway with assisted respiration and oxygen, as needed. Dilute with water or milk. For seizures, administer intravenous diazepam or lorazepam.
General information	Remove from exposure. Remove contaminated clothing. For treatment advice, seek guidance from an occupational health physician or other licensed health-care provider familiar with workplace chemical exposures. In the United States, the national poison control center phone number is 1-800-222-1222. If person is not breathing, give artificial respiration. If breathing is difficult, give oxygen if available. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	No unusual fire or explosion hazards noted.
Special protective equipment and precautions for firefighters	Wear suitable protective equipment.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Avoid inhalation of vapors. Wear appropriate personal protective equipment.
Methods and materials for containment and cleaning up	Remove sources of ignition. Absorb spillage with suitable absorbent material. For waste disposal, see section 13 of the SDS. Clean surface thoroughly to remove residual contamination. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

7. Handling and storage

Precautions for safe handling	As a general rule, when handling USP Reference Standards, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly.
Conditions for safe storage, including any incompatibilities	Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.

8. Exposure controls/personal protection

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	No exposure standards allocated.
Appropriate engineering controls	Airborne exposure should be controlled primarily by engineering controls such as general dilution ventilation, local exhaust ventilation, or process enclosure. Local exhaust ventilation is generally preferred to general exhaust because it can control the contaminant at its source, preventing dispersion into the work area. An industrial hygiene survey involving air monitoring may be used to determine the effectiveness of engineering controls. Effectiveness of engineering controls intended for use with highly potent materials should be assessed by use of nontoxic surrogate materials. Local exhaust ventilation such as a laboratory fume hood or other vented enclosure is recommended, particularly for aerosol-generating procedures.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Safety glasses with sideshields are recommended. Face shields or goggles may be required if splash potential exists or if corrosive materials are present. Approved eye protection (e.g., bearing the ANSI Z87 or CSA stamp) is preferred. Maintain eyewash facilities in the work area.
Skin protection	
Hand protection	Chemically compatible gloves. For handling solutions, ensure that the glove material is protective against the solvent being used. Use handling practices that minimize direct hand contact. Employees who are sensitive to natural rubber (latex) should use nitrile or other synthetic nonlatex gloves. Use of powdered latex gloves should be avoided due to the risk of latex allergy.
Other	For handling of laboratory scale quantities, a cloth lab coat is recommended. Where significant quantities are handled, work clothing may be necessary to prevent take-home contamination.
Respiratory protection	Where respirators are deemed necessary to reduce or control occupational exposures, use NIOSH-approved respiratory protection and have an effective respirator program in place (applicable U.S. regulation OSHA 29 CFR 1910.134).
Thermal hazards	Not available.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	Clear colorless or pale yellow slightly viscous liquid.
Physical state	Liquid.
Form	Liquid.
Odor	Pungent odor. Sweet, floral odor.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	43.5 °F (6.4 °C)
Initial boiling point and boiling range	451.22 °F (232.9 °C) 101.325 kPa
Flash point	179.96 °F (82.20 °C) Tag Closed Cup 230.00 °F (110.00 °C) Open Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	0.7
Explosive limit - upper (%)	5.5
Vapor pressure	0.001135 kPa at 25 °C
Vapor density	5.46
Relative density	Not available.
Solubility in water	Very slightly soluble.
Auto-ignition temperature	550.4 °F (288 °C)
Viscosity	Not available.
Other information	
Chemical family	Alcohols.
Density	0.83 g/cm ³ at 22 °C
Dynamic viscosity	13.8 - 14.1 mPa.s
Dynamic viscosity temperature	68 °F (20 °C)

Molecular formula	C10-H22-O
Molecular weight	158.28 g/mol
Percent volatile	100 %
Solubility (other)	Soluble in carbon tetrachloride, in glacial acetic acid, in methanol, and in acetone; miscible with ethanol, with ether, with benzene, and with chloroform.
Specific gravity	0.825 - 0.831 at 25 °C
VOC (Weight %)	100 %

10. Stability and reactivity

Reactivity	No reactivity hazards known.
Chemical stability	Risk of ignition.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat, flames, and sparks.
Incompatible materials	Strong oxidizing agents. Strong reducing agents. Organic acids. Acid anhydrides. Acid chlorides.
Hazardous decomposition products	Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions.

11. Toxicological information

Information on likely routes of exposure

Ingestion	May be fatal if swallowed and enters airways.
Inhalation	May be fatal if swallowed and enters airways.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.

Symptoms related to the physical, chemical, and toxicological characteristics Dizziness. Headache. Nausea. Vomiting. Diarrhea.

Delayed and immediate effects of exposure Central nervous system depression.

Acute toxicity May be fatal if swallowed and enters airways.

Product	Species	Test Results
Capric Alcohol (CAS 112-30-1)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	3560 mg/kg
<i>Inhalation</i>		
LC50	Mouse	4 mg/l, 2 Hours
	Rat	> 2.05 mg/l, 4 Hours
<i>Oral</i>		
LD50	Mouse	6500 mg/kg
	Rat	4720 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Local effects

75 mg/day Skin irritancy test, administered for 3 consecutive days.

Result: Irritating.

Species: Human

Eye irritancy test, administered neat.

Result: Irritant.

Species: Rabbit

Eye irritancy test, administered neat; not washed.

Result: Moderately irritating.

Species: Rabbit

Skin irritancy test, semioclusive. administered undiluted.

Result: Irritating.

Species: Rabbit

Test Duration: 4 Hours

Severity: PDII=3.3

Local effects

Skin irritancy test, semioclusive; administered undiluted.
 Result: Moderately irritating.
 Species: Rabbit
 Test Duration: 4 Hours
 Severity: PDII=2.8

Respiratory sensitization Due to lack of data the classification is not possible.

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

Sensitization

Buehler test
 Result: Not sensitizing.
 Species: Guinea pig
 Kligman maximization test
 Result: Not sensitizing.
 Species: Human

Germ cell mutagenicity Due to lack of data the classification is not possible.
 Data from germ cell mutagenicity tests were not found.

Mutagenicity

Ames test in *S. typhimurium*
 Result: Negative.
 Chinese hamster V-79 HPRT test
 Result: Negative.
 Mutagenicity test in *E. coli*
 Result: Negative.

Carcinogenicity Due to lack of data the classification is not possible. This material is not considered to be a carcinogen by IARC, NTP, or OSHA.

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

Reproductivity

0 - 1000 mg/kg/day Reproductivity and development study, administered orally during gestation.
 Result: No effects on dams or on offspring.
 Species: Rat
 0.1 mg/l Reproductivity and development study, administered by inhalation during gestation.
 Result: No maternal toxicity, fetotoxicity, or teratogenicity noted.
 Species: Rat

Specific target organ toxicity - single exposure Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard May be fatal if swallowed and enters airways.

0.2 ml Aspiration test
 Result: Death from pulmonary edema.
 Species: Rat

12. Ecological information

Ecotoxicity Very toxic to aquatic life.

Product	Species	Test Results
Capric Alcohol (CAS 112-30-1)		
Aquatic		
Fish	LC50	Carp (<i>Leuciscus idus melanotus</i>) 0.6 mg/l, 48 hours Fathead minnow (<i>Pimephales promelas</i>) 2.2 - 2.5 mg/l, 96 hours
<i>Acute</i>		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 3 mg/l, 48 hours

Persistence and degradability Readily biodegradable.

Bioaccumulative potential Not available.

Mobility in soil Not available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Not available.

Hazardous waste code	Not available.
Waste from residues / unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Capric Alcohol)
Transport hazard class(es)	9
Subsidiary class(es)	Not available.
Packing group	III

IATA

UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Capric Alcohol)
Transport hazard class(es)	9
Subsidiary class(es)	-
Packaging group	III

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available.

DOT; IATA



15. Regulatory information

US federal regulations CERCLA/SARA Hazardous Substances - Not applicable.

All components are on the U.S. EPA TSCA Inventory List.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No
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SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

Other federal regulations

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information, including date of preparation or last revision

Issue date	01-10-2014
Version #	01
Further information	Not available.
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