Material Safety Data Sheet
tert-Amyl alcohol
MSDS\# 22860

## Section 1 - Chemical Product and Company Identification

MSDS Name: tert-Amyl alcohol
Catalog AC166620000, AC166620010, AC166620025, AC220230000, AC220230010, AC220230050
Numbers: AC220230050, A730-1, NC9821143
Synonyms: tert-Pentanol; Ethyl dimethyl carbinol; 2-Methyl-2-butanol; 1,1-Dimethyl-1-propanol; Amylene hydrate; Dimethylethylcarbinol; t-Pentyl alcohol; 2-Methylbutan-2-ol.

Fisher Scientific
Company Identification:
One Reagent Lane
Fair Lawn, NJ 07410
For information in the US, call:
201-796-7100
Emergency Number US:
201-796-7100
CHEMTREC Phone Number, US:
800-424-9300
Section 2 - Composition, Information on Ingredients

CAS\#:
Chemical Name:
\%:
EINECS\#:

Hazard Symbols:


Risk Phrases:

75-85-4
2-Methyl-2-butanol
99
200-908-9

XN F


1120 37/38

Section 3 - Hazards Identification
EMERGENCY OVERVIEW
Warning! Flammable liquid and vapor. Light sensitive. May cause central nervous system depression. May be harmful if swallowed, inhaled, or absorbed through the skin. Causes eye, skin, and respiratory tract irritation. Target Organs: Central nervous system, respiratory system, skin.
Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. May be harmful if absorbed through the skin.
May cause central nervous system depression, characterized by excitement, followed by headache, dizziness,
Ingestion: drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May be harmful if swallowed.
Causes respiratory tract irritation. May cause central nervous system effects including vertigo, anxiety,
Inhalation: depression, muscle incoordination, and emotional instability. May cause effects similar to those described for ingestion.
Chronic: Prolonged or repeated skin contact may cause dermatitis. Narcotic in high concentrations.

## Section 4 - First Aid Measures

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Ingestion:
Inhalation: Notes to
Physician:

Get medical aid if irritation develops or persists. Wash clothing before reuse. Flush skin with plenty of soap and water.

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.
Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation.

## Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. During a

General Information:

Extinguishing
Media: fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode if exposed to fire.

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Water may be ineffective. For large fires, use water spray, fog or alcohol-resistant foam. Do NOT use straight streams of water. Cool containers with flooding quantities of water until well after fire is out.

Autoignition
Temperature:
$435 \operatorname{deg} \mathrm{C}(815.00 \operatorname{deg} \mathrm{~F})$
Flash Point: $20 \operatorname{deg} \mathrm{C}(68.00 \mathrm{deg} \mathrm{F})$
Explosion
Limits: Lower:
Explosion
Limits: Upper: ${ }^{9.60 \mathrm{vol} \%}$
NFPA Rating: health: 1 ; flammability: 3; instability: 0;
Section 6 - Accidental Release Measures
General Information:

Spills/Leaks:
Use proper personal protective equipment as indicated in Section 8.
Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

Section 7 - Handling and Storage
Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate Handling: ventilation. Avoid contact with skin and eyes. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Do not ingest or inhale. Prevent build up of vapors to explosive concentration. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Store in a cool, dry place. Flammables-area. Keep containers tightly closed. Store protected from light.

Section 8 - Exposure Controls, Personal Protection


OSHA Vacated PELs: 2-Methyl-2-butanol: None listed
Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.
Exposure Limits
Personal Protective Equipment

Eyes:
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators:
A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: clear, colorless
Odor: camphor - sharp odor - unpleasant odor
pH : Not available
Vapor Pressure: $16.8 \mathrm{~mm} \mathrm{Hg} @ 25$ deg C
Vapor Density: 3.04 (air=1)
Evaporation Rate: Not available
Viscosity: 3.79 cps @ 25 deg C
Boiling Point: $102 \mathrm{deg} \mathrm{C} @ 760 \mathrm{mmHg}\left(215.60^{\circ} \mathrm{F}\right)$
Freezing/Melting Point: $-12 \operatorname{deg} \mathrm{C}\left(10.40^{\circ} \mathrm{F}\right)$
Decomposition Temperature: Not available
Solubility in water: $120 \mathrm{~g} / \mathrm{L} @ 20^{\circ} \mathrm{C}$
Specific Gravity/Density: $.800 \mathrm{~g} / \mathrm{ml}$
Molecular Formula: C5H12O
Molecular Weight: 88.15
Section 10 - Stability and Reactivity

Chemical Stability:
Conditions to Avoid:
Incompatibilities with Other Materials
Hazardous Decomposition Products
Hazardous Polymerization

Stable under normal temperatures and pressures.
Ignition sources, excess heat.
Strong oxidizing agents.
Carbon monoxide, carbon monoxide, carbon dioxide.
Will not occur.
Section 11 - Toxicological Information

RTECS\#: CAS\# 75-85-4: SC0175000
RTECS:
CAS\# 75-85-4: Oral, rabbit: LD50 $=2028 \mathrm{mg} / \mathrm{kg}$;
LD50/LC50: $\quad$ Oral, rat: LD50 $=1 \mathrm{gm} / \mathrm{kg}$;
Oral, rat: LD50 $=1000 \mathrm{mg} / \mathrm{kg}$;
Other: Skin, rabbit:
Carcinogenicity: 2-Methyl-2-butanol - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other:
See actual entry in RTECS for complete information.
Section 12 - Ecological Information
Other: $\quad$ No information available.
Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.
Section 14 - Transport Information
US DOT
Shipping Name: PENTANOLS
Hazard Class: 3
UN Number: UN1105
Packing Group: II
Canada TDG
Shipping Name: AMYL ALCOHOLS
Hazard Class: 3

## Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XN F
Risk Phrases:
R 11 Highly flammable.
R 20 Harmful by inhalation.
R 37/38 Irritating to respiratory system and skin.
Safety Phrases:
S 46 If swallowed, seek medical advice immediately and show this container or label.
WGK (Water Danger/Protection)
CAS\# 75-85-4: 1
Canada
CAS\# 75-85-4 is listed on Canada's DSL List
Canadian WHMIS Classifications: B2, D2B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS\# 75-85-4 is not listed on Canada's Ingredient Disclosure List.
US Federal
TSCA
CAS\# 75-85-4 is listed on the TSCA
Inventory.
Section 16 - Other Information
MSDS Creation Date: 3/02/1998
Revision \#7 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

