



## MATERIAL SAFETY DATA SHEET

MSDS Number: ALCH414-1

Revision Date: June 17, 2002  
Supersedes Issue Date: November 28, 2001

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

- **Product identification**

Synonyms/Trade Names: Myristyl Alcohol / **CO-1495, CO-1498**

- **Product uses**

May be used for the production of alkyl amines, aluminum rolling lubricants, tertiary amines cosmetics, ethoxylates, halides/mercaptans, polymerization stabilizers, sulfation.

- **Company/undertaking identification**

North America: The Procter & Gamble Company  
Procter & Gamble Chemicals  
Sharon Woods Technical Center  
11530 Reed Hartman Highway  
Cincinnati, Ohio 45241

Department issuing MSDS: Product Safety and Regulatory Affairs  
1-800-477-8899

Europe: Procter & Gamble European Supply Company N.V.  
P&G Chemicals – Europe  
The Heights  
Brooklands  
Weybridge  
Surrey  
ENGLAND KT13 0XP  
Telephone Number: 01932-896000

- **Emergency Telephone:** P&G Ltd. - Brooklands, England: Tel 01932-896000 (day phone)  
Emergency 0191-279-2000 (day phone)  
CHEMTREC 1-800-424-9300 U.S. and Canada  
1-703-527-3887 For calls originating elsewhere

U.S. Emergency, Quality or Service Issues: Call Customer Service  
1-800-477-8899 or 513-626-6882

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation (mixture): Substance

	<u>CAS No.</u>	<u>Wt/Wt %</u>	<u>EC-No.</u>	<u>EC Symbols</u>	<u>EC R-phrases</u>
1-Tetradecanol	112-72-1	96-100	2040003	Not available	Not available

Occupational exposure limits, if applicable, are listed in Section 8

LC/LD50 information is listed in Section 11.

Full text of R phrase(s) are listed in section 16.

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## 3. HAZARDS IDENTIFICATION

European Hazard Classification: This product is not classified as dangerous according to Directive 67/548/EEC.

- Emergency Overview: Potential combustible dust if flaked or powdered. Dust generated from flaked product will be combustible at sufficient concentration.
  - Potential Health Effects:
    - Eye - Accidental exposure to the eyes may produce a mild but transient irritation.
    - Skin - Prolonged exposures may cause slight transient irritation. Heated product may cause thermal burns if contacted.
    - Inhalation - No harmful effects expected with normal use. Dusting may result in slight irritation.
    - Ingestion - May cause gastrointestinal irritation.
- If product is heated**, vaporization can occur. Eye, skin, and upper respiratory irritation can occur.
- Physical/Chemical Hazards- Potential combustible dust if flaked or powdered. Dust generated from flaked product will be combustible at sufficient concentration.
  - Environmental Hazards- None identified.

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## 4. FIRST AID MEASURES

- Eye - In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- Skin - Wash skin with soap and water upon contact. Remove contaminated clothing. If irritation persists, get medical attention. Wash clothing before reuse.
- Inhalation - Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**4. FIRST AID MEASURES - CONTINUED**

- Ingestion - If swallowed, get medical attention immediately. Drink plenty of water. Never give anything by mouth to an unconscious person.

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**5. FIRE FIGHTING MEASURES**

- Extinguishing Media: Small fires: CO<sub>2</sub> or dry chemical  
Large fires: Foam
- Unsuitable extinguishing media: Water spray may be ineffective on fire.
- Flash Point and method: > 200° F (> 93.3° C) PMCC
- Explosive limits in air:  
Upper: Not available  
Lower: Not available
- Auto-ignition temperature: Not available
- Sensitivity to mechanical impact/static discharge: Not available
- Special Protective Equipment: Wear self-contained breathing apparatus and full protective clothing.
- Other Fire Fighting Considerations: Cool containers with flooding quantities of water until well after fire is out. Potential combustible dust if flaked or powdered. Dust generated from flaked product will be combustible at sufficient concentration.
- Exposure hazards: Complete combustion forms carbon dioxide and water vapor.  
Partial combustion forms also carbon monoxide, soot, aldehydes and ketones.

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**6. ACCIDENTAL RELEASE MEASURES**

- Personal Precautions: Wear protective clothing.  
Wear an appropriate NIOSH/MSHA approved respirator if mist, vapor or dust is generated.
- Environmental Precautions: Dike flow of spilled material using soil or sandbags to minimize contamination of drains, surface and ground waters.
- Procedures for Spill/Leak Clean-up: Ventilate area and eliminate all ignition sources. Contain spill. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for disposal.

Refer to Section 8 for additional personal protection information.

Refer to Section 13 for disposal considerations.

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## 7. HANDLING AND STORAGE

- Handling: Handle in accordance with good hygiene and safety procedures. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.  
Since empty containers contain product residue, follow all hazard warnings and precautions even after container is emptied. Keep away from sources of ignition.
- Storage: Keep away from heat, sparks or open flames. Keep away from possible contact with incompatible substances. Store in a cool dry place. Store in accordance with NFPA 30.  
Suitable for storing in most common vessels including stainless steel, zinc-type spray-on linings, flaked polyester lining.
- Specific use(s): Follow bulk handling and storage procedures as noted above.

Refer to Section 6 for clean-up of spillages.

Refer to Section 13 for disposal considerations.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- General Precautions: Good industrial hygiene should be followed.  
Avoid breathing (heated) vapors. Avoid eye and skin contact.

- Exposure Limit Values: Not established

- Exposure Controls:

Engineering Controls: Ventilation: Local exhaust - preferred  
Mechanical - may be necessary if working at elevated temperatures  
or in enclosed areas.

Personal Protective Equipment:

Eye - Goggles or face shield with goggles, dependent upon potential exposure

Skin - Protective gloves: Rubber

Dependent upon degree of potential exposure, additional personal protective equipment may be required, such as chemical boots and full protective clothing.

Inhalation - None required for ambient temperature, although an appropriate NIOSH/MSHA approved air-purifying respirator should be used if a mist, vapor or dust is generated. A NIOSH/MSHA approved self-contained breathing apparatus or air-supplied respirator is recommended if the concentration exceeds the capacity of cartridge respirator. **WARNING:** Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

- Other Controls: Eye bath, safety shower, apron, protective clothing.
  - Environmental Exposure Controls: Contact Procter and Gamble for specific Community information.
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**9. PHYSICAL AND CHEMICAL PROPERTIES**

- General Information:

Physical State: @ 72° F (22° C): Solid, flake or powder

Appearance: White solid, colorless when melted

Odor: Mild fatty

Odor Threshold: Not available

- Important health, safety and environmental information:

pH: Not applicable

Boiling point/Boiling range: >500° F (260° C) @ 760 mm Hg (101.3kPa)

Flash Point & Method: > 200° F (> 93.3° C) PMCC

Flammability (solid, gas): Not available

Explosive properties: Not available

Oxidising properties: Not available

Vapor pressure: @ 72 F (22 C) < 1 mm Hg

Relative density: 0.82 @ 35/25° C

Freezing point: Not available

Solubility:

Water solubility: Negligible @ 72 F (22 C)

Fat solubility (solvent-oil to be specified): Not available

Partition coefficient: n-octanol/water: Not available

Viscosity: Not available

Vapor density: Not available

Evaporation Rate (nBuOAc=1): Not available

Explosive Limits: Not available

Auto ignition temperature: Not available

Coefficient of water/oil distribution: Not available

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**10. STABILITY AND REACTIVITY**

- Stability: Stable under normal operational conditions.
  - Conditions to Avoid: Not available
  - Materials to Avoid: Strong oxidizing agents.
  - Hazardous Decomposition Products: Does not decompose up to 400° F .  
Complete combustion forms carbon dioxide and water vapor.  
Partial combustion forms also carbon monoxide, soot, aldehydes and ketones.
  - Hazardous Polymerization: Will not occur
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**11. TOXICOLOGICAL INFORMATION**

## IRRITATION DATA:

	<u>1-Tetradecanol</u>
Eye, rabbit	500 mg MLD
Skin, human	75 mg/3D-I MOD

ACUTE TOXICITY: 1-TetradecanolOral, rat LD<sub>50</sub> > 5 gm/kgSkin, rabbit LD<sub>50</sub> > 5 gm/kgACUTE TOXICITY: 1-DodecanolOral, rat LD<sub>50</sub> > 12, 800 mg/kg

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**12. ECOLOGICAL INFORMATION****Tetradecanol (112-72-1):****Mobility**

Mass Distribution by Environmental Compartment via Fugacity Level III Model

Air: 1.16%

Water: 13.2%

Soil: 36.7%

Sediment: 48.9%

**Bioaccumulative potential**

LogKow	6.03	Burkhard et al., 1985
LogKow	5.75	SRC

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**13. DISPOSAL CONSIDERATIONS**

DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE/PROVINCIAL AND LOCAL REGULATIONS. Do not dispose of via sinks, drains or into the immediate environment.

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**14. TRANSPORT INFORMATION**

Not classified in DOT - RID/ADR - IMDG - ICAO/IATA - DGR

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**15. ADDITIONAL REGULATORY INFORMATION**

**INVENTORY STATUS:** TSCA, EINECS, DSL (Canada), Australia, Japan (ENCS), Korea, Philippines, China

WGK water endangering class: Substance non-hazardous to waters pursuant to Annex I, Number 1.2a.

**EC LABELING AND CLASSIFICATION:**

This product is not classified as dangerous according to Directive 67/548/EEC.

**15. ADDITIONAL REGULATORY INFORMATION - CONTINUED****Canada****HAZARDOUS INGREDIENTS – WHMIS (Canadian Workplace Hazardous Materials Information System)**

This product when tested as a whole is not a controlled substance within the meaning of the Hazardous Products Act.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

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**16. OTHER INFORMATION****EUROPE**

This product safety data sheet was prepared in compliance with 2001/58/EC.

**References:**

RTECS ACCESSION NUMBER XB8655000 1-Tetradecanol

RTECS ACCESSION NUMBER JR5775000 1- Dodecanol

Burkhard, L.P., Kuehl, D.W., and Veith, G.D. 1985. Evaluation of reverse phase liquid chromatography/mass spectrometry for estimation of N-octanol/water partition coefficients for organic chemicals. *Chemosphere.* 14(10):1551–1560.

Syracuse Research Corporation (SRC) Online Database.

The following sections contain revisions or new statements: 1-3, 5 -16.

Department issuing MSDS: Product Safety and Regulatory Affairs 1-800-477-8899.

The submission of the MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied are for use only in connection with occupational safety and health.

The information contained herein has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific product designated herein, and does not relate to use in combination with any other material of any other process. Procter & Gamble assumes no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the controlled product.