P&G Chemicals
Delivering solutions, creating value

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name **CO-1695K CETYL ALCOHOL NF**

Manufacturer
The Procter & Gamble Company
Procter & Gamble Chemicals
Sharon Woods Innovation Center
11530 Reed Hartman Highway
Cincinnati, Ohio 45241
1-800-477-8899 or 1-513-626-6882
PGChemMSDS.IM@pg.com
CHEMTREC: 1-800-424-9300 U.S. and Canada
CHEMTREC: 1-703-527-3887 For calls originating elsewhere

Version # 04

Revision date 06-01-2010

CAS # 36653-82-4

MSDS Number ALCH490

Product Code 60053680

Product use Production of alkyl amines, aluminum rolling lubricants, tertiary amines, cosmetics, ethoxylates, halides/mercaptans, polymerization stabilizers, and sulfation.

Synonym(s) CETYL ALCOHOL

2. Hazards Identification

Emergency overview Potential combustible dust if flaked or powdered. Dust generated from flaked product will be combustible at sufficient concentration.

OSHA regulatory status This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

Eyes May cause minor irritation on eye contact.

Skin Prolonged or excessive skin contact with this product may cause mild skin irritation.
Heated product may cause thermal burns if contacted.

Inhalation No harmful effects expected with normal use.
Inhalation of dusts may cause respiratory irritation.

Ingestion May cause irritation of the gastrointestinal tract.

Specific hazards Potential combustible dust if flaked or powdered. Dust generated from flaked product will be combustible at sufficient concentration.

3. Composition / Information on Ingredients

Components	CAS #	Percent
1-HEXADECANOL	36653-82-4	95-100

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

Skin contact Wash off with soap and water. Remove contaminated clothing. Wash clothing separately before reuse.

Inhalation Do not breathe dust or vapor. Move to fresh air. Get medical attention.

Ingestion If swallowed, especially in large quantities: Get medical attention.

5. Fire Fighting Measures

Flammable properties Not flammable by OSHA criteria. Not combustible by OSHA criteria.

Extinguishing media

Suitable extinguishing media Small fires: Dry chemical or CO2.

Larger fires: Foam.

Protection of firefighters

Specific hazards arising from the chemical Potential combustible dust if flaked or powdered. Dust generated from flaked product will be combustible at sufficient concentration. Does not decompose up to 400° F (204° C). Complete combustion forms carbon dioxide and water vapor. Partial combustion forms also carbon monoxide, soot, aldehydes and ketones.

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective clothing.

Specific methods In the event of fire, cool tanks with water spray.

6. Accidental Release Measures

Personal precautions An appropriate NIOSH/MSHA approved respirator should be used if a mist, vapor or dust is generated.

Environmental precautions Minimize contamination of drains, surface and ground waters.

Methods for containment ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Methods for cleaning up Ventilate the area. Eliminate sources of ignition. Contain spill. Neutralization not required. Collect spillage with granulates, sawdust, rags or other absorbent. Sweep or scoop up and remove. Dispose as any grease or oily material in compliance with Federal, State, and/or Local requirements.

7. Handling and Storage

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Empty containers contain product residue and can be dangerous, follow all hazard warnings and precautions even after container is emptied. Keep away from sources of ignition - No smoking.

Storage Keep away from heat, sparks and open flame. Store in tightly closed original container in a dry and cool place. Room temperature - normal conditions. Do not expose to excessive heat. Store in a cool dry place in accordance with 29 CFR 1910-106/NFPA 30. Store in most common storage vessels including stainless steel, zinc-type spray-on linings, flaked polyester lining.

8. Exposure Controls / Personal Protection

Engineering controls Local exhaust is recommended. Mechanical - may be necessary if working at elevated temperatures or in enclosed areas.

Personal protective equipment

General Boots. Apron. Provide eyewash station and safety shower. Wear suitable protective clothing.

Eye / face protection It is a good industrial hygiene practice to minimize eye contact.

Skin protection Protective gloves should be worn when handling heated molten product.

Respiratory protection No personal respiratory protective equipment normally required. An appropriate NIOSH/MSHA approved respirator should be used if a mist, vapor or dust is generated.

Environmental exposure controls Contact Procter and Gamble for specific Community information.

9. Physical & Chemical Properties

Appearance Solid. Flakes. Powder.

Color Waxy White.

Odor Mild. Soapy.

Odor threshold Not available.

Physical state Solid.

Form Flakes.

pH Not available.

Melting point 116.6 - 122 °F (47 - 50 °C)

Freezing point	Not available.
Boiling point	> 480 °F (> 248.9 °C) @ 760 mm Hg (101.3kPa)
Flash point	320 °F (160 °C) Pensky-Martens Closed Cup
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	< 0 kPa at 30°C < 1 mm Hg @ 72 F (22 C)
Vapor density	Not available.
Specific gravity	Not available.
Relative density	0.81 @ 55/25 C
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	Not available.

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal 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	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Impurities	Test Results
1-TETRADECANOL (112-72-1)	Dermal Human: 75 mg 3.00 days -I MOD (Irritation Data) Other MLD Rabbit: 500 mg Eye Irritation Acute Dermal LD50 Rabbit: > 5 g/kg Acute Oral LD50 Rat: > 5 g/kg

Acute effects

1-HEXADECANOL (36653-82-4):

Acute Oral Toxicity:
Practically nontoxic. 1-Hexadecanol has an LD50 of greater than 20 gms per kilogram of body weight for rats (i.e. at maximum possible dosage, none of the animals died).

Further information

Eye Irritation:
Non-hazardous. 1-Hexadecanol produced only mild transient eye irritation with rabbits. The degree and duration of irritation elicited by the undiluted, powdered fatty alcohol was equivalent to or less than that produced by a 10% aqueous solution of real soap.

Skin Irritation - Humans:
Non-hazardous. (30% in isopropanol) produced little or no primary skin irritation with human subjects in a 24-hour closed patch test. The degree of irritation elicited was less than that produced by a 4% aqueous solution of real soap.

12. Ecological Information

Ecotoxicological data

Product	Test Results
1-HEXADECANOL (36653-82-4)	Fathead minnow (Pimephales promelas): > 500 mg/l 5.00 days Berger, 1958

Product	Test Results
1-HEXADECANOL (36653-82-4)	LC50 Bluegill (Lepomis macrochirus): > 1000 mg/l 96.00 hours
Impurities	**Test Results**
1-OCTADECANOL (112-92-5)	LC50 Bluegill (Lepomis macrochirus): >= 1000 mg/l 96.00 hours

Ecotoxicity

1-HEXADECANOL (36653-82-4):

Mobility:
Mass Distribution by Environmental Compartment via Fugacity Level III Model:
Air: 0.762% Water: 8.75% Soil: 29.9% Sediment: 60.6%

PERSISTENCE AND DEGRADABILITY:
Bioaccumulative Potential:
LogKow 6.65 Burkhard et al., 1985
LogKow 6.73 SRC
BCF 56 Freitag et al.., 1982

Microbiological Inhibition: None at 10,000 mg/l.

13. Disposal Considerations

Disposal instructions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
Do not dispose of via sinks, drains or into the immediate environment.

14. Transport Information

DOT

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance

No

Section 311 hazardous chemical

No

Inventory status

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
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No

Country(s) or region	Inventory name	On inventory (yes/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)

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Contains no California Prop 65 chemicals.

US - New Jersey Community RTK (EHS Survey): Reportable threshold

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Contains no Pennsylvania Right To Know hazardous substances

16. Other Information

HMIS® ratings
Health: 0
Flammability: 1
Physical hazard: 0

NFPA ratings
Health: 0
Flammability: 1
Instability: 0

Bibliography

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Freitag, D., Geyer, H., Kraus, A., Viswanathan, R., Kotzias, D., Attar, A., Klein, W., and Korte, F. 1982. Ecotoxicological profile analysis VII. Screening chemicals for their environmental behavior by comparative evaluation. Ecotoxicol. Environ. Safety 6:60-81.

Syracuse Research Corporation (SRC) Online Database.

Disclaimer

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.

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This data sheet contains changes from the previous version in section(s): This document has undergone significant changes and should be reviewed in its entirety.