

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	CO-1099K
Version #	01
Revision date	11-10-2010
CAS #	112-30-1
MSDS Number	ALCH524
Product use	Production of alkyl amines, aluminum rolling lubricants, tertiary amines, cosmetics, ethoxylates, halides/mercaptans, polymerization stabilizers, and sulfation.
Synonym(s)	DECYL ALCOHOL
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

2. Hazards Identification

Emergency overview	Irritating to eyes. If product is heated, vaporization can occur. Eye, skin, and upper respiratory irritation can occur.
Potential health effects	
Skin	Mildly irritating to skin with prolonged exposure.
Inhalation	Not applicable at ambient temperature. High vapor concentrations may cause irritation of the nose and throat. Coughing. Dizziness. Headache.
Ingestion	May cause irritation of the gastrointestinal tract.
Potential environmental effects	None known.

3. Composition / Information on Ingredients

Components	CAS #	Percent
1-DECANOL	112-30-1	99-100

4. First Aid Measures

First aid procedures	
Eye contact	Flush thoroughly with water for at least 15 minutes. Get medical assistance.
Skin contact	Wash clothing separately before reuse. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	Get medical attention. Never give anything by mouth to a victim who is unconscious or is having convulsions. Induce vomiting only under the instruction of a physician.

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media

Small fires: Dry chemical or CO₂. Water fog.

Larger fires: Foam.

Use alcohol approved foam procedures.

Cool containers with flooding quantities of water until well after fire is out.

Unsuitable extinguishing media

Water may be ineffective.

Protection of firefighters

Specific hazards arising from the chemical

Vapors may travel to a source of ignition and flash back.

Complete combustion forms carbon dioxide and water vapor. Partial combustion forms also carbon monoxide, soot, aldehydes and ketones.

Protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special protective equipment for fire-fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Not available.

6. Accidental Release Measures

Personal precautions

Wear self-contained breathing apparatus and full protective clothing.

Environmental precautions

Dike flow of spilled material using soil or sandbags to minimize contamination of drains, surface and ground waters.

Methods for cleaning up

Ventilate the contaminated area. Eliminate sources of ignition.

Contain spill.

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Use clean non-sparking tools to collect absorbed material.

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.

Ground and bond containers when transferring material.

Use spark-proof tools and explosion-proof equipment.

Since emptied containers retain product residue, follow label warnings even after container is emptied.

Keep away from heat and sources of ignition.

Storage

Keep away from heat, sparks and open flame.

Keep away from possible contact with incompatible substances.

Store in cool, dry place.

Specific uses

Follow bulk handling and storage procedures as noted above.

8. Exposure Controls / Personal Protection

Engineering controls

Local exhaust is recommended.

Mechanical - may be necessary if working at elevated temperatures or in enclosed areas.

Provide ventilation to meet exposure limits.

Personal protective equipment

General

Boots. Apron. Eye wash fountain and emergency showers are recommended. Wear suitable protective clothing.

Eye / face protection

Goggles/face shield are recommended.

Skin protection

Rubber gloves.

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

Respiratory protection

None required for ambient temperature, although an appropriate NIOSH/MSHA approved air-purifying respirator should be used if a mist or vapor 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.

9. Physical & Chemical Properties

Appearance	Liquid.
Physical state	Liquid.
Form	Not available.
Color	Colorless.
Odor	Fishy, Alcoholic.
Odor threshold	Not available.
pH	Not available.
Vapor pressure	0.008 mm Hg @ 75 F (23.9 C) est. 0.034 mm Hg @ 100 F (37.8 C) est. 0.262 mm Hg @ 140 F (60 C) est.
Vapor density	~5.5
Boiling point	>= 400 °F (>= 204.4 °C) @ 760 mm Hg (101.3kPa)
Melting point/Freezing point	Not available.
Solubility (water)	Negligible
Specific gravity	Not available.
Relative density	0.83 @ 25/25 C
Flash point	212 °F (100 °C) Pensky-Martens Closed Cup
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	550 °F (287.8 °C)

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Materials to avoid	Strong oxidizing agents.
Hazardous decomposition products	Carbon monoxide. 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**

Product	Test Results
1-DECANOL (112-30-1)	Dermal Human: 4.00 hours Significantly less irritating than 20% Sodium Lauryl Sulfate (positive control). Dermal Rabbit: 83 mg Severe irritation. Dermal Rabbit: OECD Test Guidelines 404, PII=3.33. Acute Dermal LD50 Rabbit: 3560 mg/kg Acute Oral LD50 Rat: Practically non-toxic by acute oral route.

12. Ecological Information**Ecotoxicological data**

Product	Test Results
1-DECANOL (112-30-1)	EC50 Water flea (Daphnia magna): 11 mg/l 24.00 hours LC50 Bleak (Alburnus alburnus): 7.2 mg/l 96.00 hours

Product

1-DECANOL (112-30-1)

Test ResultsLC50 Fathead minnow (*Pimephales promelas*): 2.4 mg/l 96.00 hoursLC50 Fathead minnow (*Pimephales promelas*): 2.3 mg/l 96.00 hours**Persistence / degradability**

Sewage: Aerobic biodegradataion 30d 77% (as COD)

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**

Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2))

Not regulated

DEA Essential Chemical Code Number

Not regulated

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated

DEA Exempt Chemical Mixtures Code Number

Not regulated

CERCLA (Superfund) reportable quantity

None

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**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

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

Country(s) or region	Inventory name	On inventory (yes/no)*
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 - New Jersey Community RTK (EHS Survey): Reportable threshold

US - Pennsylvania RTK - Hazardous Substances: Listed substance

1-DECANOL (CAS 112-30-1)	Listed.
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16. Other Information

HMIS® ratings

Health: 2
 Flammability: 2
 Physical hazard: 0

NFPA ratings

Health: 2
 Flammability: 2
 Instability: 0

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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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