

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	CO-1214
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 #	05
Revision date	10-05-2010
CAS #	67762-41-8
MSDS Number	ALCH408
Product use	Production of alkyl amines, aluminum rolling lubricants, tertiary amines, cosmetics, ethoxylates, halides/mercaptans, polymerization stabilizers, and sulfation.
Synonym(s)	Lauryl/Myristyl Alcohol

2. Hazards Identification

OSHA regulatory status	This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Routes of exposure	Not available.
Potential environmental effects	May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
ALCOHOLS, C10-16	67762-41-8	100

Constituents	CAS #	Percent
1-DODECANOL	112-53-8	> 65
1-DECANOL	112-30-1	< 1

4. First Aid Measures

First aid procedures	
Eye contact	Rinse with water. Get medical attention if irritation develops or persists.
Skin contact	Rinse skin with water/shower. Get medical attention if irritation develops or persists.
Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

5. Fire Fighting Measures

Flammable properties	Not flammable by OSHA criteria. Not combustible by OSHA criteria.
Extinguishing media	
Suitable extinguishing media	Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).

Special protective equipment for fire-fighters Wear suitable protective equipment.
Specific methods In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions Keep unnecessary personnel away.
Environmental precautions Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for containment ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.
Methods for cleaning up Should not be released into the environment.

Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water.

Never return spills in original containers for re-use.

7. Handling and Storage

Handling DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight.
Storage Keep away from heat, sparks and open flame.

8. Exposure Controls / Personal Protection

Personal protective equipment
Eye / face protection Not normally needed.
Skin protection No special protective equipment required.
Respiratory protection No personal respiratory protective equipment normally required.
General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance Liquid.
Color Water white.
Odor Fresh, Waxy.
Odor threshold Not available.
Physical state Liquid.
Form Not available.
pH Not available.
Melting point 64.4 - 71.6 °F (18 - 22 °C)
Freezing point Not available.
Boiling point > 350 °F (> 176.7 °C) @ 760 mm Hg (101.3kPa)
Flash point 290 °F (143.3 °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 < 10 mm Hg @ 72 F (22 C)
Vapor density Not available.
Specific gravity 0.82 @ 35/22 C
Relative density Not available.
Solubility (water) Negligible @ 72 F (22 C)

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.
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

Product

ALCOHOLS, C10-16 (67762-41-8)

Test Results

Acute Oral LD50 Rat: \geq 20.5 g/kg of body weight; Based on compositionally similar product

Constituents

1-DECANOL (112-30-1)

Test Results

Dermal Human: 4.00 hours Significantly less irritating than 20% Sodium Lauryl Sulfate (positive control).

Dermal Rabbit: 83 mg Severe eye 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.

Dermal Human: 75 mg 3D-I SEV

Acute Oral LD50 Rabbit: $>$ 36 ml/kg

1-DODECANOL (112-53-8)

Chronic effects Not available.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Skin corrosion/irritation Not available.

Epidemiology Not available.

Neurological effects Not available.

12. Ecological Information

Ecotoxicological data

Product

ALCOHOLS, C10-16 (67762-41-8)

Test Results

LC50 Bluegill (*Lepomis macrochirus*): 894.5 mg/l 96.00 hours
Alkyl Range: C12-14

LC50 Fathead minnow (*Pimephales promelas*): 1.01 mg/l 96.00 hours
1-Dodecanol (112-53-8)

LC50 Trout family (*Salmonidae*): \geq 1 mg/l 96.00 hours
Tetradecanol (112-72-1)

Constituents

1-DECANOL (112-30-1)

Test Results

EC50 Water flea (*Daphnia magna*): 11 mg/l 24.00 hours

LC50 Bleak (*Alburnus alburnus*): 7.2 mg/l 96.00 hours

LC50 Fathead minnow (*Pimephales promelas*): 2.4 mg/l 96.00 hours

LC50 Fathead minnow (*Pimephales promelas*): 2.3 mg/l 96.00 hours

1-DODECANOL (112-53-8)

EC10 Green algae (*Scenedesmus subspicatus*): 0.73 mg/l 72.00 hours (1)

EC50 Bacterium (*Pseudomonas putida*): $>$ 100 ($>$ LoS) * OECD SIDS

Constituents

1-DODECANOL (112-53-8)

Test Results

EC50 Green algae (*Scenedesmus subspicatus*): 0.97 mg/l 72.00 hours (1)
EC50 Rotifer (*Brachionus calyciflorus*): 0.72 mg/l 48.00 hours Versteeg et al 1997.
EC50 Water flea (*Daphnia magna*): 48.00 hours 0.77 mg/l (n) *
EC50 Water flea (*Daphnia magna*): 320 mg/l 48.00 hours (>LoS) * OECD SIDS
LC50 Fathead minnow (*Pimephales promelas*): 96.00 hours 1.01 mg/L (m) *
LC50 Harpacticoid copepod (*Nitocra spinipes*): 0.9 mg/l 96.00 hours Linden et al 1979.
LC50 Harpacticoid copepod (*Nitocra spinipes*): 21 mg/l 96.00 hours Bengtsson et al 1984.
NOEC Green algae (*Scenedesmus subspicatus*): 0.3 mg/l 72.00 hours (1)
NOEC Water flea (*Daphnia magna*): 1 mg/l 21.00 day OECD SIDS

Ecotoxicity

Components of this product have been identified as having potential environmental concerns.

Environmental effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. Disposal Considerations

Disposal instructions

Do not dispose of waste into sewer. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable regulations.

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

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

1-DECANOL (CAS 112-30-1) Listed.

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

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

NFPA ratings
 Health: 0
 Flammability: 1
 Instability: 0

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.

Issue date 10-05-2010