

SAFETY DATA SHEET

1. Identification

GHS product identifier	TA-1618BL
MSDS Number	ALCH454
Product Code	99360233
Version #	04
Issue date	08-17-2011
CAS #	Mixture
Product use	Production of alkyl amines, aluminum rolling lubricants, tertiary amines, cosmetics, ethoxylates, halides/mercaptans, polymerization stabilizers, and sulfation.
Recommended Restrictions	Not available.
Synonym(s)	Cetyl and stearyl alcohol mixture
Manufacturer	P&G Chemicals Asia 238-A Thompson Road #21-01/10 Novena Square Tower A Singapore 307684 (65) 6824 5728 (day phone) PGChemMSDS.IM@pg.com CHEMTREC: +1-703-527-3887 Quality or Service Issues: 1-800-477-8899 or +1-513-626-6882

2. Hazards identification

GHS classification

Physical hazards	Explosives	Classification not possible	
	Flammable gases	Not applicable	
	Flammable aerosols	Not applicable	
	Oxidizing gases	Not applicable	
	Gases under pressure	Not applicable	
	Flammable liquids	Not applicable	
	Flammable solids	Classification not possible	
	Self-reactive substances and mixtures	Classification not possible	
	Pyrophoric liquids	Not applicable	
	Pyrophoric solids	Classification not possible	
	Self-heating substances and mixtures	Classification not possible	
	Substances and mixtures which, in contact with water, emit flammable gases	Classification not possible	
	Oxidizing liquids	Not applicable	
	Oxidizing solids	Classification not possible	
	Organic peroxides	Classification not possible	
	Corrosive to metals	Classification not possible	
	Health hazards	Acute toxicity, oral	Not classified
		Acute toxicity, dermal	Not classified
		Acute toxicity, inhalation	Not classified
		Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation		Classification not possible	
	Sensitization, respiratory	Classification not possible	

	Sensitization, skin	Classification not possible
	Germ cell mutagenicity	Classification not possible
	Carcinogenicity	Not classified
	Reproductive toxicity	Classification not possible
	Specific target organ toxicity, single exposure	Classification not possible
	Specific target organ toxicity, repeated exposure	Classification not possible
	Aspiration hazard	Classification not possible
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Not classified
	Hazardous to the aquatic environment, long-term hazard	Not classified
	Hazardous to the ozone layer	Classification not possible

Precautionary statement

Prevention	Wear protective gloves. Wash thoroughly after handling.
Storage	No special storage precautions noted.
Disposal	Can be incinerated when in compliance with local regulations. Dispose of contents/container in accordance with local/regional/national/international regulations.

Specific hazards No hazards resulting from the material as supplied.

3. Composition/information on ingredients

Components	CAS #	Percent
1-OCTADECANOL	112-92-5	65-77
1-HEXADECANOL	36653-82-4	23-33

4. First aid measures

First aid procedures

Inhalation	Avoid breathing dust.
Skin	Not available.
Eye	Get medical attention if irritation persists after washing.
Ingestion	If swallowed, especially in large quantities: Get medical attention.

Notes to physician Not available.

5. Fire-fighting measures

Suitable extinguishing media	Foam. Dry chemical powder. Carbon dioxide (CO ₂).
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.
Protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and full protective clothing. Cool containers exposed to flames with water until well after the fire is out.

6. Accidental release measures

Personal precautions	Self-contained breathing apparatus.
Environmental precautions	Minimize contamination of drains, surface and ground waters.

Methods for containment	Ventilate the area. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Contain spill. Neutralization not required. Collect spillage with granulates, sawdust, rags or other absorbent. Dispose as any grease or oily material in compliance with Federal, State, and/or Local requirements.
Methods for cleaning up	Ventilate the area. Eliminate ignition sources including sources of electrical, static or frictional sparks. Contain spill. Neutralization not required.

7. Handling and storage

Handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin, and clothing. Avoid heat, sparks, open flames and other ignition sources. Wash thoroughly after handling. Empty containers contain product residue and can be dangerous, follow all hazard warnings and precautions even after container is emptied.
Storage	Store in cool, dry place. Store in most common storage vessels including stainless steel, zinc-type spray-on linings, flaked polyester lining.

8. Exposure controls / personal protection

Recommended monitoring procedures	Not available.
Engineering controls	Local ventilation should be provided. Mechanical ventilation may be required.
Personal protective equipment	
Eye/face protection	Not normally needed. It is a good industrial hygiene practice to minimize eye contact.
Skin protection	Protective gloves should be worn when handling heated molten product. No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact. It is a good industrial hygiene practice to minimize skin contact. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
Respiratory protection	Not normally needed. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
Hand protection	When handling hot material, use heat resistant gloves.

9. Physical and chemical properties

Appearance	
Solid. Flakes. Powder.	
Physical state	Solid.
Color	White.
Form	Solid.
Odor	Mild. Soapy.
Odor threshold	Not available.
pH	Not available.
Melting point/Freezing point	122 °F (50 °C) typical
Boiling point	>= 480 °F (>= 248.9 °C) @ 760 mm Hg (101.3kPa)
Flash point	310 °F (154.4 °C) Pensky-Martens Closed Cup
Evaporation rate	Not available.
Flammability (Train fire)	Not available.
Flammability limits in air, lower, % by volume	Not available.
Flammability limits in air, upper, % by volume	Not available.
Vapor pressure	<1 mm Hg @ 72 F (22° C) 0 hPa estimated

Relative density	0.81 @ 65/25 C
Solubility (H2O)	Negligible at 72 F (22 C)
Octanol/H2O coeff	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Chemical stability	Not available.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
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.

11. Toxicological information

Toxicological data

Product	Test Results
TA-1618BL (Mixture)	Rabbit: No eye irritation from instillation of undiluted product. Dermal Rabbit: 24.00 hours Closed patch study with undiluted product produced mild primary irritation. Acute Dermal LD50 Rabbit: 11267.6 mg/kg estimated Acute Dermal LD50 Rat: 5 g/kg of body weight
Components	Test Results
1-OCTADECANOL (112-92-5)	Acute Dermal LD50 Rabbit: 8000 mg/kg 24.00 hours Scientific Assoc Inc, 1977, Read across from 112-72-1 1-tetradecanol Acute Dermal LD50 Rabbit: 8000 mg/kg 48.00 hours Scientific Assoc Inc, 1977, Read across from 112-72-1 1-tetradecanol Acute Oral LD50 Rat: > 2000 mg/kg OECD 401, Hempstock C, 1996 Acute Oral LD50 Rat: > 2000 mg/kg OECD 201, Hempstock C, 1996
Impurities	Test Results
1-TETRADECANOL (112-72-1)	Ames test: not mutagenic. OECD Test Guideline 471 (Literature value) Human: Patch-Test: not sensitizing (literature value) Dermal Rabbit: Skin: slightly irritating Other Rabbit: Eye: irritating OECD Test Guideline 405 Acute Dermal LD50 Rabbit: > 2000 mg/kg OECD Test Guideline 402 Acute Dermal LD50 Rabbit: 7.13 ml/kg Acute Oral LD50 Rat: > 2000 mg/kg OECD Test Guideline 401
1-EICOSANOL (629-96-9)	Acute Dermal LD50 Rabbit: > 20 ml/kg Acute Oral LD50 Rat: > 10000 mg/kg Acute Oral LD50 Rat: > 64 ml/kg

Toxicological information

Acute Oral Toxicity:

Practically nontoxic. 1-Octadecanol 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).

Eye Irritation (Rabbits): Undiluted 1-Octadecanol produced mild transient eye irritation. 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 (Human): Non-hazardous 1-Octadecanol (30% in isopropanol) produced little or no primary skin irritation 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.

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).

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.

Skin corrosion/irritation	Not available.
Serious eye damage/eye irritation	Not available.
Other information	Not available.

12. Ecological information

Ecotoxicological data
Product

Product	Test Results
TA-1618BL (Mixture)	Bluegill (<i>Lepomis macrochirus</i>): 520 mg/l No observed effect level. EC50 Daphnia: 0.0345 mg/l 48.00 hours estimated LC50 Bluegill (<i>Lepomis macrochirus</i>): >= 1000 mg/l 96.00 hours
Components	Test Results
1-OCTADECANOL (112-92-5)	EC0 Water flea (<i>Daphnia magna</i>): 1000 mg/l 48.00 hours OECD 202, Guhl M 1992 EL50 Green algae (<i>Desmodesmus subspicatus</i>): > 10 mg/l 96.00 hours OECD 201, Dr Guhl 1992 LC50 Rainbow Trout: > 0.4 mg/l 96.00 hours OECD 203, Wetton PM 1996 NOEC Water flea (<i>Daphnia magna</i>): 20.6 µg/l 21.00 days EPA OPPTS 850.1300, ABC 1999
1-HEXADECANOL (36653-82-4)	EC50 Water flea (<i>Daphnia magna</i>): > 0.01 mg/l 48.00 hours OECD (literature value) EL50 Green algae (<i>Scenedesmus</i>): > 980 mg/l 96.00 hours OECD 201 (literature value) LC50 Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>): > 0.4 mg/l 96.00 hours OECD 203 (literature value)
Impurities	Test Results
1-TETRADECANOL (112-72-1)	EC50 Daphnia: 0.1439 mg/l 48.00 hours estimated LC50 Trout family (<i>Salmonidae</i>): >= 1 mg/l 96.00 hours Tetradecanol (112-72-1)

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

1-OCTADECANOL (112-92-5) Mobility:

Mass Distribution by Environmental Compartment via Fugacity Level III Model:
Air: 0.63% Water: 7.35% Soil: 28.7% Sediment: 63.3%

PERSISTENCE AND DEGRADABILITY:

Bioaccumulative Potential:

Log Kow 7.19 Burkhard et al 1985

Log Kow 7.72% SRC

BCF 100,000 OECD SIDS

1-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%

PERSISTENCE AND DEGRADABILITY:

Bioaccumulative Potential:

LogKow 6.03 Burkhard et el., 1985

LogKow 5.75 SRC

13. Disposal considerations

Disposal methods

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

ADR

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

15. Regulatory information

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
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)*
Switzerland	Switzerland FOPH	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)

16. Other information

Disclaimer	<p>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.</p> <p>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.</p>
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SDS sections updated	This document has undergone significant changes and should be reviewed in its entirety.