

## MATERIAL SAFETY DATA SHEET

### 1. Product and Company Identification

<b>Material name</b>	<b>C-810 Kosher (NA)</b>
<b>Manufacturer</b>	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
<b>Version #</b>	02
<b>Revision date</b>	05-01-2010
<b>CAS #</b>	67762-36-1
<b>MSDS Number</b>	LC131
<b>Product Code</b>	99325347
<b>Product use</b>	Production of cutting oils, specialty soaps, and chain terminators.
<b>Synonym(s)</b>	Hexanoic, Octanoic and Decanoic acid blend; Caproic, Caprylic and Capric acid blend

### 2. Hazards Identification

<b>Emergency overview</b>	CAUTION  EYE AND SKIN IRRITANT.  Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.  If product is heated, vaporization can occur. Eye, skin, and upper respiratory irritation can occur.
<b>Potential health effects</b>	
<b>Eyes</b>	May cause severe but transient eye irritation.
<b>Skin</b>	Prolonged skin exposure may cause severe irritation.
<b>Inhalation</b>	May elicit pulmonary irritation if mist or vapors are formed. May cause coughing or difficult breathing.
<b>Ingestion</b>	May cause gastrointestinal irritation.

### 3. Composition / Information on Ingredients

Components	CAS #	Percent
Fatty acids, C6-12	67762-36-1	90 - 100

### 4. First Aid Measures

#### First aid procedures

<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
<b>Skin contact</b>	Wash the skin immediately with soap and water. Exposed clothing should be changed promptly and cleaned before reuse. Get medical attention.

**Inhalation** If breathing stops, provide artificial respiration.  
If breathing is difficult, give oxygen.  
Get medical attention immediately.

**Ingestion** Remove material from mouth.  
Drink plenty of water.  
Do NOT induce vomiting.  
Get medical attention immediately.

## 5. Fire Fighting Measures

### Extinguishing media

**Suitable extinguishing media** SMALL FIRES: Use CO2 or dry chemical.  
LARGE FIRES: Use foam.

**Unsuitable extinguishing media** Do not use water as an extinguisher.

### Protection of firefighters

**Specific hazards arising from the chemical** Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide.

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

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

## 6. Accidental Release Measures

**Personal precautions** An appropriate NIOSH/MSHA approved respirator should be used if a mist or vapor is generated.  
Wear suitable eye/face protection and gloves.  
Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

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

**Methods for cleaning up** Cover contaminated surface with soda ash or sodium bicarbonate. Mix. Flood with water and flush down drain. Wash site with sodium bicarbonate solution.

## 7. Handling and Storage

**Handling** Handle in accordance with good industrial hygiene and safety practice.  
Avoid contact with skin, eyes and clothing.  
Wash thoroughly after handling.  
Since emptied containers retain product residue, follow label warnings even after container is emptied.  
Keep away from sources of ignition.

**Storage** Keep away from possible contact with incompatible substances.  
Store in acid resistant vessels such as stainless steel, aluminum, or steel coated with resin lining such as Lithcote LC-19 or Kanigen.  
Do not store near sources of ignition.

## 8. Exposure Controls / Personal Protection

**Engineering controls** Use local exhaust ventilation.  
Mechanical - may be necessary if working at elevated temperatures or in enclosed areas.

### Personal protective equipment

**General** Observe good industrial hygiene practices.  
Avoid breathing (heated) vapors.  
Avoid contact with eyes.  
Avoid contact with skin.

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

**Eye / face protection** Goggles or face shield with goggles, dependent upon potential exposure.

**Skin protection** Rubber or plastic 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**

<b>Appearance</b>	Liquid.
<b>Color</b>	Water white to Light yellow.
<b>Odor</b>	Musty, Pungent.
<b>Odor threshold</b>	Not available.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>pH</b>	Not available.
<b>Melting point</b>	Not available.
<b>Freezing point</b>	Not available.
<b>Boiling point</b>	> 450 °F (> 232.2 °C) @ 760 mm Hg (101.3kPa)
<b>Flash point</b>	275 °F (135 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not available.
<b>Vapor pressure</b>	< 1 mm Hg @ 72 F (22 C)
<b>Vapor density</b>	Not available.
<b>Specific gravity</b>	Not available.
<b>Relative density</b>	0.9 @ 22/22 C
<b>Solubility (water)</b>	Negligible @ 72 F (22 C)
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>VOC</b>	Not available.

**10. Chemical Stability & Reactivity Information**

<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Conditions to avoid</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Does not decompose up to 400° F (204° C). Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.

**11. Toxicological Information****Toxicological data**

<b>Product</b>	<b>Test Results</b>
Fatty acids, C6-12 (67762-36-1)	Dermal Human: 2.3 4.00 hours Primary Irritation Index. Degree of Irritancy: Moderate. Dermal Guinea pig: 0.5 4.00 hours Primary Irritation Index. Degree of Irritancy: Slight. Dermal Rabbit: 4.5 4.00 hours Primary Irritation Index. Degree of Irritancy: Moderate. Acute Oral LD50 Albino rat: 12.6 g/kg of body weight
<b>Constituents</b>	<b>Test Results</b>
OCTANOIC ACID (124-07-2)	Acute Dermal LD50 Rabbit: > 5 g/kg

**Constituents**

OCTANOIC ACID (124-07-2)

HEXANOIC ACID (142-62-1)

DECANOIC ACID (334-48-5)

**Test Results**

Acute Oral LD50 Rat: &gt; 10 g/kg

Dermal MLD Rabbit: 10 mg 24.00 hours Open

Other Rabbit: 695 ug Eye-SEV

Acute Dermal LD50 Rabbit: 630 mg/kg

Acute Oral LD50 Rat: 3000 mg/kg

Acute Dermal LD50 Rabbit: &gt; 5 g/kg

Acute Oral LD50 Rat: &gt; 10 g/kg

**Impurities**

DODECANOIC ACID (143-07-7)

**Test Results**

Oral LD50 Rat: 12 g/kg

Other Rabbit: 72.00 hours Corneal opacity, mild conjunctivitis, iritis - observation

**Carcinogenicity**

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

**Further information**

Eye Irritation: Rabbits

Undiluted C-810 with no rinsing of the eyes produced severe ocular damage whereas rinsing of the eyes with water after instillation of the test material reduced involvement to mild to moderate but transient irritation.

Eye Irritation: Monkeys

Undiluted C-810 with no rinsing of the eyes with water after instillation, produced superficial corneal effects and rather severe congestion of the conjunctiva. All eyes were normal within nine days after instillation of the test material.

**12. Ecological Information****Ecotoxicological data****Product**

Fatty acids, C6-12 (67762-36-1)

**Test Results**

COD Value - 2.0g O2/g of product

LC50 Bluegill (*Lepomis macrochirus*): 28.2 mg/l 96.00 hoursNOEC Bluegill (*Lepomis macrochirus*): 10 mg/l**Constituents**

OCTANOIC ACID (124-07-2)

**Test Results**EC50 Green algae (*Nitzschia closterium*): 144 mg/l 72.00 hoursEC50 Water flea (*Daphnia magna*): 550 mg/l 24.00 hoursLC0 Red killifish (*Oryzias latipes*): 57 mg/l 96.00 hours in freshwaterLC50 Bluegill (*Lepomis macrochirus*): 39.9 mg/l 96.00 hoursLC50 Ide, silver or golden orfe (*Leuciscus idus*): 173 mg/l 48.00 hoursLC50 Red killifish (*Oryzias latipes*): 105 mg/l 96.00 hours in seawater

HEXANOIC ACID (142-62-1)

LC50 Fathead minnow (*Pimephales promelas*): 88 mg/l 96.00 hoursLC50 Gammarus (*Hyale plumulosa*): 235 mg/l 96.00 hoursLC50 Red killifish (*Oryzias latipes*): 80 mg/l in freshwaterLC50 Red killifish (*Oryzias latipes*): 235 mg/l in seawaterLC50 Water flea (*Daphnia magna*): 22 mg/l 24.00 hours

DECANOIC ACID (334-48-5)

Microbial inhibition: None at 10,000 mg/l

LC50 Bluegill (*Lepomis macrochirus*): 18.9 mg/lLC50 Gammarus (*Hyale plumulosa*): 41 mg/lLC50 Red killifish (*Oryzias latipes*): 20 mg/l in freshwaterLC50 Red killifish (*Oryzias latipes*): 31 mg/l in seawater

**Constituents**

DECANOIC ACID (334-48-5)

**Impurities**

DODECANOIC ACID (143-07-7)

**Test Results**NOEC Bluegill (*Lepomis macrochirus*): 10 mg/l**Test Results**EC50 Algae (*Pseudokirchneriella subcapitata*): > 6.2 mg/l  
72.00 hoursEC50 Gammarus (*Hyale plumulosa*): 8.6 mg/l 48.00 hoursLC50 Bluegill (*Lepomis macrochirus*): 63.3 mg/l 96.00 hoursLC50 Red killifish (*Oryzias latipes*): 8.6 mg/l 96.00 hoursNOEC Algae (*Pseudokirchneriella subcapitata*): 3.4 mg/l 72.00  
hoursNOEC Bluegill (*Lepomis macrochirus*): 32 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****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)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	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)	No
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**

HEXANOIC ACID (CAS 142-62-1)

Listed.

**16. Other Information**

**Further information**

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

**HMIS® ratings**

Health: 0  
Flammability: 0  
Physical hazard: 0

**NFPA ratings**

Health: 0  
Flammability: 0  
Instability: 0

**Bibliography**

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"Safety Studies on a Series of Fatty Acids", by G.B. Briggs, R.L. Doyle and J.A. Young; *Amer. Ind. Hyg. Assoc. J.*; 251-253 (April 1976).  
*Patty's Industrial Hygiene and Toxicology*, 4th ed. Edited by George D. Clayton \* Florence E. Clayton.  
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*Sax's Dangerous Properties of Industrial Materials*, 9th Ed. Richard J. Lewis.  
K. Verschueren. *Handbook of Environmental Data on Organic Chemicals*, 3rd Ed. 1998.  
BIBRA toxicity profile (1996) n-Decanoic acid.  
BIBRA toxicity profile (1988) n-Octanoic acid.  
RTECS ACCESSION NUMBER RT4550000 – Palmitic acid  
RTECS ASSESSION NUMBER OE9800000 - Lauric acid.

**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**

05-01-2010

**This data sheet contains changes from the previous version in section(s):**

Product and Company Identification: Product and Company Identification  
Other Information: Disclaimer