

MATERIAL SAFETY DATA SHEET

NFPA	HMIS	Personal Protective Equipment
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Health Hazard	1
Fire Hazard	1
Reactivity	0



See Section 8.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
Product code:	C1651
Product Name:	CLOFIBRATE
Chemical Name:	Propionic acid, 2-(p-chlorophenoxy)-2-methyl-, ethyl ester
Synonyms:	Acetic acid, (p-chlorophenoxy)dimethyl-, ethyl ester alpha-(p-Chlorophenoxy)isobutyric acid, ethyl ester alpha-p-Chlorophenoxyisobutyryl ethyl ester 2-(4-Chlorophenoxy)-2-methylpropanoic acid ethyl ester 2-(p-Chlorophenoxy)-2-methylpropionic acid ethyl ester Citiflus Claripex Clobrat Clofar Clofibram Clofibrat Clofinit Clofipront Ethyl chlorophenoxyisobutyrate Ethyl-alpha-p-chlorophenoxy-isobutyrate Ethyl alpha-(4-chlorophenoxy)isobutyrate Ethyl para-chlorophenoxyisobutyrate Ethyl 2-(p-chlorophenoxy)isobutyrate Ethyl alpha-(p-chlorophenoxy)-alpha-methylpropionate Ethyl alpha-(4-chlorophenoxy)-alpha-methylpropionate Ethyl 2-(4-chlorophenoxy)-2-methylpropionate Ethyl 2-(para-chlorophenoxy)-2-methylpropionate (IUPAC) Ethyl clofibrate Isobutyric acid, alpha-(p-chlorophenoxy)-, ethyl ester Propionic acid, 2-(4-chlorophenoxy)-2-methyl-, ethyl ester
Recommended use:	No information available.
CAS #:	637-07-0
RTECS #	UE9480000
Formula:	C12-H15-Cl-O3
Cl#:	Not available

Supplier:	Spectrum Chemicals and Laboratory Products, Inc. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000
Order Online At:	https://www.spectrumchemical.com
Emergency Telephone Number:	CHEMTREC: 1-800-424-9300
Contact Person:	Regina Wachenheim (East Coast)
Contact Person:	Martin LaBenz (West Coast)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW			
CAUTION !			
May be harmful if swallowed			
May cause skin and eye irritation			
May cause irritation of respiratory tract			
Odor:	Physical state:	Appearance:	Color:
Faint. Characteristic.	Liquid.	No information available	Clear. Colorless.

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Potential Health Effects:

Skin Contact:

May cause skin irritation.

Eye Contact:

May cause eye irritation.

Inhalation:

May cause irritation of respiratory tract.

Ingestion:

May be harmful if swallowed. May cause abdominal pain, nausea, vomiting, diarrhea. May affect the liver. It may affect the kidneys. May cause central nervous system effects. May affect the cardiovascular system. May affect respiration. May affect the blood.

Chronic Potential Health Effects:

Component

Clofibrate
637-07-0 (100)

Carcinogen Status:

Group 3 Not classifiable as to its carcinogenicity to humans by IARC

Target Organs:

Liver.

Mutagenic Effects:

May affect genetic material

Teratogenic Effects:

No information available

Aggravated Medical Conditions:

No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Clofibrate	637-07-0	100

4. FIRST AID MEASURES

General Advice:	Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126)
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops.
Eye Contact:	Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. In case of shortness of breath, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
Notes to Physician:	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties

Flashpoint (°C/°F):	113 °C/235 °F
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Flash Point Tested according to: Closed cup

Lower Explosion Limit (%):	No information available
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Upper Explosion Limit (%):	No information available
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Autoignition Temperature (°C/°F):	No information available
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Suitable Extinguishing Media:	Carbon dioxide (CO ₂). Dry chemical. Water spray mist or foam.
Unsuitable Extinguishing Media:	No information available.
Hazardous Combustion Products:	Carbon monoxide; Carbon dioxide; Nitrogen oxides; hydrogen chloride gas
Specific hazards:	May be combustible at high temperatures Container explosion may occur under fire conditions or when heated

Special Protective Equipment for Firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Specific Methods:

No information available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Remove all sources of ignition.

Environmental Precautions:

No information available.

Methods for Cleaning Up:

Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling**Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors or spray mist. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Storage**Technical Measures/Storage Conditions:**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep refrigerated. Keep at temperatures between 2 and 8 °C. Protect from light. Sensitive to light. Store in light-resistant containers. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents. Strong bases.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Personal Protective Equipment**Eye protection:**

Goggles. Safety glasses with side-shields.

Skin and body protection:

Long sleeved clothing. Chemical resistant apron. Gloves.

Respiratory protection: Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent. .

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

National occupational exposure limits

United States

U.S Occupational Exposure Limits: Not determined

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Clofibrate - 637-07-0	None	None	None	None

Canada

Canada Occupational Exposure Limits: Not determined

Components	Alberta	British Columbia	Ontario	Quebec
Clofibrate 637-07-0	None	None	None	None

Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

Components	Australia	Mexico
Clofibrate 637-07-0	None	None

9. PHYSICAL AND CHEMICAL PROPERTIES

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid.	Appearance: No information available	Color: Clear. Colorless.
Odor: Faint. Characteristic.	Molecular/Formula weight: 242.70	Taste: No information available
Flash point (°C): 113 °C	Lower Explosion Limit (%): No information available	Upper Explosion Limit (%): No information available
Autoignition Temperature (°C/°F): No information available	Melting point/range(°C/°F): No information available	Boiling point/range(°C/°F): 148-156 °C/298.4-312.8 °F @ 20 mmHg
pH: No information available	Decomposition temperature(°C/°F): No information available	Specific gravity: 1.138-1.144 @ 20 °C
Density (g/cm3): No information available	Bulk density: No information available	Vapor pressure @ 20°C (kPa): No information available
Evaporation rate: No information available	Vapor density: No information available	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): No information available	Miscibility: Miscible with Acetone
Solubility: Insoluble in water Soluble in alcohol Soluble in Chloroform		

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions
Conditions to avoid:	Heat. Ignition sources. Exposure to light. Incompatible materials.
Incompatible Materials:	Strong oxidizing agents. Strong bases.
Hazardous decomposition products:	Carbon monoxide. Carbon dioxide. Hydrogen chloride gas.
Possibility of Hazardous Reactions:	No information available
Polymerization:	Hazardous polymerisation does not occur
Corrosivity:	No information available
Special Remarks on Corrosivity:	No information available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Clofibrate - 637-07-0

LD50/oral/rat = 940 mg/kg Oral LD50 Rat

LD50/oral/mouse = 1220 mg/kg
LD50/dermal/rat =
 No information available
LD50/dermal/rabbit = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information =
 1280 mg/kg Oral LD50 Guinea pig
 2400 mg/kg Oral LD50 Hamster

Product Information

LC50/inhalation/rat No information available
LC50/Inhalation/mouse No information available
LD50/dermal/rabbit No information available
LD50/dermal/rat No information available
LD50/oral/mouse = 1220mg/kg
LD50/oral/rat = 940mg/kg

Local Effects

Skin irritation: May cause skin irritation.
Eye irritation: Contact with eyes may cause irritation.
Inhalation: May cause irritation of respiratory tract.
Ingestion: May be harmful if swallowed. May cause abdominal pain, nausea, vomiting, diarrhea. May cause dehydration. May affect behavior/central nervous system (weakness, ataxia, somnolence, convulsions). May affect behavior/central nervous system (tremors). May affect behavior/central nervous system (dizziness, headache). May cause fatigue. May affect respiration (respiratory depression). May affect liver . May affect blood (changes in serum composition). May affect the cardiovascular system (cardiac arrhythmias).
Sensitization: No information available

Chronic Toxicity

Chronic Toxicity Prolonged or repeated ingestion may cause nausea, vomiting, diarrhea. Prolonged or repeated ingestion may cause abdominal pain, dehydration. Prolonged or repeated ingestion may cause weight loss. Prolonged or repeated ingestion may affect the liver, and kidneys. Prolonged or repeated ingestion may affect the blood (leukopenia). Prolonged or repeated ingestion may affect the blood (anemia). Prolonged or repeated ingestion may affect the blood (agranulocytosis, eosinophilia,). Prolonged or repeated ingestion may affect the blood (changes in serum composition). Prolonged or repeated ingestion may affect behavior/central nervous system. Other symptoms of chronic ingestion include dry skin, dry brittle hair, alopecia, rash, itching, breast tenderness in men.

Carcinogenic effects: Not classifiable as to its carcinogenicity to humans. The evidence of carcinogenicity is inadequate in humans and inadequate or limited in experimental animals.

Components	NTP	IARC	OSHA HCS - Carcinogens	ACGIH - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances

Clofibrate	Not listed	Group 3 - Monograph 66 [1996] Supplement 7 [1987]	Not listed	Not listed	Not listed	Not listed
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Mutagenic Effects: May affect genetic material

Reproductive Effects: May cause adverse reproductive effects based on animal data
May cause adverse developmental effects based on animal data

Teratogenic Effects: No information available

Target Organs: Liver.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: No information available

Ecotoxicity effects: No data available.

Aquatic toxicity: No information available

Mobility: No information available

Persistence and degradability: No information available

Bioaccumulative potential: No information available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Clofibrate	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not regulated

Proper Shipping Name: No information available

Hazard Class: No information available

Packing Group: None

Subsidiary Risk: Not applicable

Marine Pollutant: No data available

ERG No: No information available

DOT RQ (lbs): No information available

TDG (Canada)

UN-No: Not Regulated

Proper Shipping Name: No information available

Hazard Class: No information available

Packing Group: No information available

Subsidiary Risk: No information available
Description: No information available

ADR

UN-No: No information available
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available
IMDG Page: No information available
Marine Pollutant No information available
MFAG: No information available
Maximum Quantity: No information available

RID

UN-No: No information available
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available

ICAO

UN-No: No information available
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available

IATA

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	Philippines (PICCS)	KOREA KECL	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Clofibrate</i>	Not Listed	Not present	Not present	Present (9)-266	Present	Present	Present 211-277-4

U.S. Regulations

Clofibrate

California Directors List of Hazardous Substances: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Clofibrate	carcinogen	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
Clofibrate	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Clofibrate	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

Non-controlled

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	Canada (DSL)	Canada (NDSL)
Clofibrate	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Clofibrate	Not listed	Not listed

EU Classification

R-phrases

R22 - Harmful if swallowed.

R40 - Limited evidence of a carcinogenic effect

S -phrase(s)

S46 - If swallowed, seek medical advice immediately and show this container or label.

Components	Classification	Concentration Limits:	Safety Phrases
Clofibrate		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xn - Harmful.

Xn

**16. OTHER INFORMATION**

The MSDS format complies with ANSI Z400.1/Z129.1-2010 standards.

Preparation Date:	18-Dec-2013
Reason for revision:	Not applicable
Prepared by:	Sonia Owen
Literature reference:	No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.