

## MATERIAL SAFETY DATA SHEET

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Revised 3/06/98

PERFLUORO-N-OCTANOIC ACID (99% N-ISOMER)  
PCR, INC.

Replaces 5/06/97

Printed 7/20/05

## Section I - General Information

52921

Clariant LSM  
PO Box 1466  
Gainesville, FL 32602  
Phone: 352-376-8246

Emergency Phone: Chemtrec 1-800-424-9300

Chemical Name: Perfluoro-n-octanoic acid (99% n-isomer)

Trade Name: none

Chemical Family: Fluorinated acid

CAS #: 335-67-1

Formula: C<sub>7</sub>H<sub>15</sub>COOH

Molecular Weight: 414.06

PCR Product Number : 11026-2

## Section II - Hazardous Ingredients/Identity Information

| HAZARDOUS COMPONENTS<br>(Specific Chemical ID) | OSHA PEL | ACGIH TLV | OTHER LIMITS<br>RECOMMENDED | % |
|--|----------|-----------|-----------------------------|---|
| Perfluoro-n-octanoic acid                      | none     | none      |                             |   |
| Perfluorooctanoic acid isomers                 |          |           |                             |   |

## Section III - Physical/Chemical Characteristics

BOILING POINT: 189 C (736 mm) Evaporation Rate( -1 ) : NA

VAPOR PRESSURE(mm Hg): NA Melting Point: 59-60 C

VAPOR DENSITY (AIR = 1): NA

SPECIFIC GRAVITY (H<sub>2</sub>O=1): NA

SOLUBILITY IN WATER: slightly soluble (9.5 g/L at 25 C)

APPEARANCE AND ODOR: white crystals

## Section IV - Fire and Explosion Hazard Data

FLASH POINT (METHOD USED): NA

FLAMMABLE LIMITS:

LEL: NA

UEL: NA

EXTINGUISHING MEDIA: NA

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Section IV - Fire and Explosion Hazard Data (Cont.)

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SPECIAL FIRE FIGHTING PROCEDURES:

A self-contained breathing apparatus and full protective clothing should be worn when fighting fires.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Toxic fumes or mists of fluoride may be produced on thermal decomposition.

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Section V - Reactivity Data

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STABILITY (CHOOSE ONE): ( ) UNSTABLE  
(x) STABLE

CONDITIONS TO AVOID: none known

INCOMPATIBILITY (MATERIALS TO AVOID): strong bases

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: HF, CO, CO2

HAZARDOUS (CHOOSE ONE): ( ) MAY OCCUR  
POLYMERIZATION (x) WILL NOT OCCUR

CONDITIONS TO AVOID: none known

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Section VI - Health Hazard Data

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ROUTE(S) OF ENTRY: INHALATION? yes SKIN? yes INGESTION? yes

HEALTH HAZARDS (ACUTE AND CHRONIC):

Possible DNA damage.

Rat, intraperitoneal, no toxic effects noted.

CARCINOGENICITY: NTP? no IARC MONOGRAPHS? no OSHA REGULATED? no

SIGNS AND SYMPTOMS OF EXPOSURE:

May cause irritation to skin and eyes.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

No data available.

EMERGENCY AND FIRST AID PROCEDURES:

Inhalation:

Remove victim to fresh air. If breathing is difficult administer oxygen.

Consult a physician.

Ingestion:

Get medical attention.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes.

Get medical attention.

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Section VI - Health Hazard Data (Cont.)

Skin Contact:  
Wash with soap. Flush with water for at least 15 minutes

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Section VII - Precautions for Safe Handling and Use

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:  
Neutralize; contain with suitable absorbant.

WASTE DISPOSAL METHOD:  
Landfill in accordance with all regulations

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:  
Use with adequate ventilation.

OTHER PRECAUTIONS:  
None known.

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Section VIII - Control Measures

RESPIRATORY PROTECTION (SPECIFY TYPE):

dust mask

VENTILATION:

LOCAL EXHAUST: recommended  
MECHANICAL (GENERAL):  
SPECIAL:  
OTHER:

PROTECTIVE GLOVES:

Rubber or neoprene

EYE PROTECTION:

Safety glasses or chemical splash goggles

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

As required by your company

WORK/HYGIENIC PRACTICES:

Wash after handling.

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Section IX - Regulatory Information

LISTS:

RCRA: Yes ( ) No (x)  
CERCLA: Yes ( ) No (x)  
SARA 312 HAZARD CLASS: acute  
  
SARA 313: Yes ( ) no (x)  
  
TSCA: Yes (x) No ( )

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Section IX - Regulatory Information (Cont.)

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N/A = Not Available  
NA = Not applicable

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PERFLUOROOCTANOIC ACID  
 PCR, INC.

Section I - General Information

52921

Clariant LSM  
 PO Box 1466  
 Gainesville, FL 32602  
 Phone: 352-376-8246

Emergency Phone: ChemTrev 1-800-424-9100

Chemical Name: Perfluorooctanoic acid

Trade Name: None

Chemical Family: Fluoroacid

CAS #: 335-67-1

Formula: F(CF<sub>2</sub>)<sub>7</sub>COOH

Molecular Weight: 414.06

PCR Product Number: 13170-6

*old part # 13610-1*

Section II - Hazardous Ingredients/Identity Information

| HAZARDOUS COMPONENTS<br>(Specific Chemical ID) | OSHA PEL | ACGIH TLV | OTHER LIMITS<br>RECOMMENDED |    |
|--|----------|-----------|-----------------------------|----|
| Perfluorooctanoic acid                         | none     | none      |                             | 99 |

Section III - Physical/Chemical Characteristics

BOILING POINT: 189 @ 736      Evaporation Rate( =1 ) : NA  
 VAPOR PRESSURE(mm Hg): N/A      Melting Point: 53 C  
 VAPOR DENSITY (AIR = 1): > 1  
 SPECIFIC GRAVITY (H<sub>2</sub>O=1): N/A  
 SOLUBILITY IN WATER: Slightly soluble  
 APPEARANCE AND ODOR: White solid

Section IV - Fire and Explosion Hazard Data

FLASH POINT (METHOD USED): > 212  
 FLAMMABLE LIMITS: Not determined  
 LEL:  
 UEL:

EXTINGUISHING MEDIA:  
 CO<sub>2</sub>, Dry chemical, Foam

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Section IV - Fire and Explosion Hazard Data (Cont.)

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Water

UNUSUAL FIRE AND EXPLOSION HAZARDS:  
None known to PCR

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Section V - Reactivity Data

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STABILITY (CHOOSE ONE): ( ) UNSTABLE  
(x) STABLE

CONDITIONS TO AVOID: NA

INCOMPATIBILITY (MATERIALS TO AVOID): Bases, strong oxidizers

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: HF, CO, CO2

HAZARDOUS POLYMERIZATION (CHOOSE ONE): ( ) MAY OCCUR  
(x) WILL NOT OCCUR

CONDITIONS TO AVOID: NA

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Section VI - Health Hazard Data

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ROUTE(S) OF ENTRY: INHALATION? No SKIN? yes INGESTION? yes  
LD50 : 189 mg/Kg (ip -mouse)

HEALTH HAZARDS (ACUTE AND CHRONIC):

To the best of our knowledge the toxicity of this material has not been determined. May be harmful if inhaled, ingested or by skin absorption.

CARCINOGENICITY: NTP? no IARC MONOGRAPHS?no OSHA REGULATED? no

SIGNS AND SYMPTOMS OF EXPOSURE:  
No data availableMEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:  
No data available

EMERGENCY AND FIRST AID PROCEDURES:

Inhalation:

NA

Ingestion:

Give plenty of milk. Get medical attention.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes.  
Get medical attention.

Skin Contact:

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Section VI - Health Hazard Data (Cont.)

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Wash with soap. Flush with water for at least 15 minutes

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Section VII - Precautions for Safe Handling and Use

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:  
Sweep up spill and place in container for disposal

## WASTE DISPOSAL METHOD:

Incinerate in accordance with all regulations

## PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Store in a cool, dry area. Avoid skin contact.

## OTHER PRECAUTIONS:

NA

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Section VIII - Control Measures

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RESPIRATORY PROTECTION (SPECIFY TYPE): Dust mask

## VENTILATION:

LOCAL EXHAUST: Suggested

MECHANICAL (GENERAL):

SPECIAL:

OTHER:

## PROTECTIVE GLOVES:

Rubber or neoprene

## EYE PROTECTION:

Safety glasses or chemical splash goggles

## OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

As required by your company

## WORK/HYGIENIC PRACTICES:

Wash after handling

The above information is believed to be correct but,  
should be used only as a guide. MSDS prepared by:

N/A - Not available

NA - Not applicable





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Clariant LSM  
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Phone: 352-376-8246

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Trade Name: None

Chemical Family: Fluoroacid

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Formula: F(CF<sub>2</sub>)<sub>7</sub>COOH

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old part # 13610-1

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| HAZARDOUS COMPONENTS<br>(Specific Chemical ID) | OSHA PEL | ACGIH TLV | OTHER LIMITS<br>RECOMMENDED |
|--|----------|-----------|-----------------------------|
| Perfluorooctanoic acid                         | none     | none      | 99                          |

Section III - Physical/Chemical Characteristics

BOILING POINT: 189 @ 736      Evaporation Rate( -1 ) : NA  
 VAPOR PRESSURE(mm Hg): N/A      Melting Point: 53 C  
 VAPOR DENSITY (AIR = 1): > 1  
 SPECIFIC GRAVITY (H<sub>2</sub>O=1): N/A  
 SOLUBILITY IN WATER: Slightly soluble  
 APPEARANCE AND ODOR: White solid

Section IV - Fire and Explosion Hazard Data

FLASH POINT (METHOD USED): > 212  
 FLAMMABLE LIMITS: Not determined  
 LEL:  
 UEL:

EXTINGUISHING MEDIA:  
 CO<sub>2</sub>, Dry chemical, Foam

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Section IV - Fire and Explosion Hazard Data (Cont.)

Water

UNUSUAL FIRE AND EXPLOSION HAZARDS:  
None known to PCR

Section V - Reactivity Data

STABILITY (CHOOSE ONE): ( ) UNSTABLE  
(x) STABLE

CONDITIONS TO AVOID: NA

INCOMPATIBILITY (MATERIALS TO AVOID): Bases, strong oxidizers

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: HF, CO, CO2

HAZARDOUS POLYMERIZATION (CHOOSE ONE): ( ) MAY OCCUR  
(x) WILL NOT OCCUR

CONDITIONS TO AVOID: NA

Section VI - Health Hazard Data

ROUTE(S) OF ENTRY: INHALATION? No SKIN? yes INGESTION? yes  
LD50 : 189 mg/Kg (ip -mouse)

HEALTH HAZARDS (ACUTE AND CHRONIC):

To the best of our knowledge the toxicity of this material has not been determined. May be harmful if inhaled, ingested or by skin absorption.

CARCINOGENICITY: NTP? no IARC MONOGRAPHS?no OSHA REGULATED? no

SIGNS AND SYMPTOMS OF EXPOSURE:  
No data available

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:  
No data available

EMERGENCY AND FIRST AID PROCEDURES:

Inhalation:

NA

Ingestion:

Give plenty of milk. Get medical attention

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes.  
Get medical attention.

Skin Contact:

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Section VI - Health Hazard Data (Cont.)

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Wash with soap. Flush with water for at least 15 minutes

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Section VII - Precautions for Safe Handling and Use

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:  
Sweep up spill and place in container for disposal

## WASTE DISPOSAL METHOD:

Incinerate in accordance with all regulations

## PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Store in a cool, dry area. Avoid skin contact.

## OTHER PRECAUTIONS:

NA

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Section VIII - Control Measures

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RESPIRATORY PROTECTION (SPECIFY TYPE): Dust mask

## VENTILATION:

LOCAL EXHAUST: Suggested

MECHANICAL (GENERAL):

SPECIAL:

OTHER:

## PROTECTIVE GLOVES:

Rubber or neoprene

## EYE PROTECTION:

Safety glasses or chemical splash goggles

## OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

As required by your company

## WORK/HYGIENIC PRACTICES:

Wash after handling

The above information is believed to be correct but,  
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N/A - Not available

NA - Not applicable

