1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Pluronic® F-68
Product Number : P1300
Brand : Sigma
Supplier : Sigma-Aldrich
Telephone : +1 800-325-5832
Fax : +1 800-325-5052
Emergency Phone # (For both supplier and manufacturer) : (314) 776-6555
Preparation Information : Sigma-Aldrich Corporation
Product Safety - Americas Region
1-800-521-8956

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards
No known OSHA hazards

GHS Classification
Skin irritation (Category 3)

GHS Label elements, including precautionary statements
Pictogram : none
Signal word : Warning
Hazard statement(s) : H316
Causes mild skin irritation.
Precautionary statement(s) : none

HMIS Classification
Health hazard: 1
Flammability: 0
Physical hazards: 0

NFPA Rating
Health hazard: 1
Fire: 0
Reactivity Hazard: 0

Potential Health Effects
Inhalation : May be harmful if inhaled. May cause respiratory tract irritation.
Skin : May be harmful if absorbed through skin. May cause skin irritation.
Eyes : May cause eye irritation.
Ingestion : May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS
Synonyms : Polyoxyethylene-polyoxypropylene block copolymer

Formula : (C3H6O.C2H4O)x

No ingredients are hazardous according to OSHA criteria.

4. FIRST AID MEASURES

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

**Conditions of flammability**
Not flammable or combustible.

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters**
Wear self contained breathing apparatus for fire fighting if necessary.

**Hazardous combustion products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

**Environmental precautions**
Do not let product enter drains.

**Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

**Precautions for safe handling**
Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for safe storage**
Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

**Personal protective equipment**

**Respiratory protection**
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
**Hand protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection**
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace,. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Hygiene measures**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**
- **Form**: solid
- **Colour**: colourless

**Safety data**
- **pH**: 6.0 - 7
- **Melting point/freezing point**: no data available
- **Boiling point**: no data available
- **Flash point**: no data available
- **Ignition temperature**: no data available
- **Autoignition temperature**: no data available
- **Lower explosion limit**: no data available
- **Upper explosion limit**: no data available
- **Vapour pressure**: no data available
- **Density**: no data available
- **Water solubility**: no data available
- **Partition coefficient: n-octanol/water**: no data available
- **Relative vapour density**: no data available
- **Odour**: no data available
- **Odour Threshold**: no data available
- **Evaporation rate**: no data available

### 10. STABILITY AND REACTIVITY

**Chemical stability**
Stable under recommended storage conditions.

**Possibility of hazardous reactions**
no data available
Conditions to avoid
no data available

Materials to avoid
Strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50
LD50 Oral - rat - 9,380 mg/kg
LD50 Oral - mouse - 15,000 mg/kg

Inhalation LC50
no data available

Dermal LD50
LD50 Dermal - rabbit - 20,000 mg/kg

Other information on acute toxicity
no data available

Skin corrosion/irritation
Skin - rabbit - Mild skin irritation - 24 h

Serious eye damage/eye irritation
Eyes - rabbit - Mild eye irritation - 24 h
Eyes - rabbit - No eye irritation - OECD Test Guideline 405

Respiratory or skin sensitization
rabbit - Did not cause sensitization on laboratory animals.

Germ cell mutagenicity
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
no data available

Teratogenicity
no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available
Aspiration hazard
no data available

Potential health effects

- **Inhalation**
  May be harmful if inhaled. May cause respiratory tract irritation.
- **Ingestion**
  May be harmful if swallowed.
- **Skin**
  May be harmful if absorbed through skin. May cause skin irritation.
- **Eyes**
  May cause eye irritation.

Signs and Symptoms of Exposure
Effects due to ingestion may include: Diarrhoea, Weakness. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects
no data available

Additional Information
RTECS: MD0911050

12. ECOLOGICAL INFORMATION

- **Toxicity**
  - Toxicity to fish: static test LC50 - other fish - > 10,000 mg/l - 96 h
  - Method: OECD Test Guideline 203

- **Persistence and degradability**
  no data available

- **Bioaccumulative potential**
  Bioaccumulation is unlikely.

- **Mobility in soil**
  no data available

- **PBT and vPvB assessment**
  no data available

- **Other adverse effects**
  no data available

13. DISPOSAL CONSIDERATIONS

- **Product**
  Offer surplus and non-recyclable solutions to a licensed disposal company.

- **Contaminated packaging**
  Dispose of as unused product.

14. TRANSPORT INFORMATION

- **DOT (US)**
  Not dangerous goods

- **IMDG**
  Not dangerous goods

- **IATA**
  Not dangerous goods

15. REGULATORY INFORMATION

- **OSHA Hazards**
  No known OSHA hazards

- **SARA 302 Components**
  SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
No SARA Hazards

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

- Polyethylene glycol, propoxylated
  - CAS-No.: 9003-11-6
  - Revision Date: 

New Jersey Right To Know Components

- Polyethylene glycol, propoxylated
  - CAS-No.: 9003-11-6
  - Revision Date: 

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Further information
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