SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers
   Product name : Pluronic® F-68
   Product Number : P1300
   Brand : Sigma
   REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
   CAS-No. : 9003-11-6

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet
   Company : Sigma-Aldrich Chemie BV
              Stationsplein 4
              3331 LL ZWIJNDRECHT
              NETHERLANDS
   Telephone : +31 78-620-5411
   Fax : +31 78-620-5421
   E-mail address : eurtechserv@sial.com

1.4 Emergency telephone number
   Emergency Phone # : 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
   This substance is not classified as dangerous according to Directive 67/548/EEC.

2.2 Label elements
   The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other hazards - none

SECTION 3: Composition/information on ingredients

3.1 Substances
   Synonyms : Polyoxyethylene-polyoxypropylene block copolymer
   Formula : (C3H6O.C2H4O)x
   CAS-No. : 9003-11-6

   No components need to be disclosed according to the applicable regulations.
SECTION 4: First aid measures

4.1 Description of 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.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture
Carbon oxides

5.3 Advice for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information
no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter drains.

6.3 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.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
7.3 **Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 **Control parameters**

**Components with workplace control parameters**

8.2 **Exposure controls**

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

**Personal protective equipment**

**Eye/face 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 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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

**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).

**Control of environmental exposure**
Do not let product enter drains.
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance
   - Form: solid
   - Colour: colourless

b) Odour
   - no data available

c) Odour Threshold
   - no data available

d) pH
   - 6.0 - 7

e) Melting point/freezing point
   - no data available

f) Initial boiling point and boiling range
   - no data available

h) Flash point
   - no data available

i) Evaporation rate
   - no data available

j) Flammability (solid, gas)
   - no data available

k) Upper/lower flammability or explosive limits
   - no data available

l) Vapour pressure
   - no data available

m) Vapour density
   - no data available

n) Relative density
   - no data available

o) Water solubility
   - no data available

p) Partition coefficient: n-octanol/water
   - no data available

q) Auto-ignition temperature
   - no data available

r) Decomposition temperature
   - no data available

s) Viscosity
   - no data available

9.2 Other safety information
   - no data available

SECTION 10: Stability and reactivity

10.1 Reactivity
   - no data available

10.2 Chemical stability
   - Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
   - no data available

10.4 Conditions to avoid
   - no data available

10.5 Incompatible materials
   - Strong oxidizing agents
10.6 Hazardous decomposition products
Other decomposition products - no data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - rat - 9.380 mg/kg
LD50 Oral - mouse - 15.000 mg/kg
LD50 Dermal - rabbit - 20.000 mg/kg

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

Serious eye damage/eye irritation
Eyes - rabbit
Result: Mild eye irritation - 24 h

Respiratory or skin sensitisation
- rabbit
Did not cause sensitisation 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.

Reproductive toxicity
no data available

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

Additional Information
RTECS: MD0911050
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.

SECTION 12: Ecological information

12.1 Toxicity
Toxicity to fish static test LC50 - other fish - > 10.000 mg/l - 96 h (OECD Test Guideline 203)

12.2 Persistence and degradability
no data available

12.3 Bioaccumulative potential
Bioaccumulation is unlikely.

12.4 Mobility in soil
no data available
12.5 **Results of PBT and vPvB assessment**  
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 **Other adverse effects**  
no data available

**SECTION 13: Disposal considerations**

13.1 **Waste treatment methods**  
**Product**  
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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

**SECTION 14: Transport information**

14.1 **UN number**  
ADR/RID: -  
IMDG: -  
IATA: -

14.2 **UN proper shipping name**  
ADR/RID: Not dangerous goods  
IMDG: Not dangerous goods  
IATA: Not dangerous goods

14.3 **Transport hazard class(es)**  
ADR/RID: -  
IMDG: -  
IATA: -

14.4 **Packaging group**  
ADR/RID: -  
IMDG: -  
IATA: -

14.5 **Environmental hazards**  
ADR/RID: no  
IMDG Marine pollutant: no  
IATA: no

14.6 **Special precautions for user**  
no data available

**SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
no data available

15.2 **Chemical Safety Assessment**  
For this product a chemical safety assessment was not carried out

**SECTION 16: Other information**

**Further information**  
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