

# Safety Data Sheet

## Lupasol® FT P

Revision date : 2017/04/10

Version: 3.1

Page: 1/10

(30591992/SDS\_GEN\_US/EN)

### 1. Identification

#### Product identifier used on the label

## Lupasol® FT P

#### Recommended use of the chemical and restriction on use

Recommended use\*: for industrial use only

\* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

#### Details of the supplier of the safety data sheet

##### Company:

BASF CORPORATION  
100 Park Avenue  
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

#### Emergency telephone number

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP (4357)

#### Other means of identification

Chemical family: polyethyleneimine

### 2. Hazards Identification

#### According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

#### Classification of the product

|                 |          |  |
|-----------------|----------|--|
| Acute Tox.      | 4 (oral) | Acute toxicity                                 |
| Eye Dam./Irrit. | 2A       | Serious eye damage/eye irritation              |
| Skin Sens.      | 1        | Skin sensitization                             |
| Aquatic Acute   | 2        | Hazardous to the aquatic environment - acute   |
| Aquatic Chronic | 2        | Hazardous to the aquatic environment - chronic |

#### Label elements

Pictogram:

# Safety Data Sheet

## Lupasol® FT P

Revision date : 2017/04/10  
Version: 3.1

Page: 2/10  
(30591992/SDS\_GEN\_US/EN)



Signal Word:  
Warning

### Hazard Statement:

|      |  |
|------|--|
| H319 | Causes serious eye irritation.                   |
| H302 | Harmful if swallowed.                            |
| H317 | May cause an allergic skin reaction.             |
| H401 | Toxic to aquatic life.                           |
| H411 | Toxic to aquatic life with long lasting effects. |

### Precautionary Statements (Prevention):

|      |  |
|------|--|
| P280 | Wear protective gloves and eye/face protection.                        |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray.                      |
| P273 | Avoid release to the environment.                                      |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P270 | Do not eat, drink or smoke when using this product.                    |
| P264 | Wash with plenty of water and soap thoroughly after handling.          |

### Precautionary Statements (Response):

|                    |  |
|--------------------|--|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P303 + P362        | IF ON SKIN (or hair): Wash with plenty of soap and water.  |
| P333 + P311        | If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician.   |
| P301 + P312        | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.   |
| P330               | Rinse mouth.   |
| P362 + P364        | Take off contaminated clothing and wash it before reuse.   |
| P391               | Collect spillage.  |
| P337 + P311        | If eye irritation persists: Call a POISON CENTER or doctor/physician.  |

### Precautionary Statements (Disposal):

|      |   |
|------|---|
| P501 | Dispose of contents/container to hazardous or special waste collection point. |
|------|---|

### Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

## 3. Composition / Information on Ingredients

**According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

| <u>CAS Number</u> | <u>Weight %</u>    | <u>Chemical name</u> |
|-------------------|--------------------|----------------------|
| 9002-98-6         | >= 45.0 - <= 55.0% | polyethyleneimine    |

## 4. First-Aid Measures

### Description of first aid measures

# Safety Data Sheet

## Lupasol® FT P

Revision date : 2017/04/10  
Version: 3.1

Page: 3/10  
(30591992/SDS\_GEN\_US/EN)

### General advice:

Remove contaminated clothing.

### If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Assist in breathing if necessary.

### If on skin:

Wash thoroughly with soap and water. If irritation develops, seek medical attention.

### If in eyes:

Flush with copious amounts of water for at least 15 minutes. Hold eyelids open to facilitate rinsing. If irritation develops, seek medical attention.

### If swallowed:

Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

### Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Hazards: No applicable information available.

### Indication of any immediate medical attention and special treatment needed

#### Note to physician

Treatment: Treat symptomatically.

---

## 5. Fire-Fighting Measures

### Extinguishing media

Suitable extinguishing media:  
water spray, dry powder, foam

### Special hazards arising from the substance or mixture

Hazards during fire-fighting:

The substances/groups of substances mentioned can be released in case of fire.

**carbon monoxide, carbon dioxide, corrosive gases/vapours, toxic gases/vapours**

**Cool endangered containers with water-spray.**

### Advice for fire-fighters

Protective equipment for fire-fighting:  
Wear a self-contained breathing apparatus.

### Further information:

Fire debris must be disposed of in accordance with official regulations.

# Safety Data Sheet

## Lupasol® FT P

Revision date : 2017/04/10  
Version: 3.1

Page: 4/10  
(30591992/SDS\_GEN\_US/EN)

---

### 6. Accidental release measures

Further accidental release measures:

High risk of slipping due to leakage/spillage of product.

#### **Personal precautions, protective equipment and emergency procedures**

Use personal protective clothing.

#### **Environmental precautions**

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

#### **Methods and material for containment and cleaning up**

For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

---

### 7. Handling and Storage

#### **Precautions for safe handling**

Ensure thorough ventilation of stores and work areas. Wear suitable gloves and eye/face protection.

#### **Conditions for safe storage, including any incompatibilities**

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

---

### 8. Exposure Controls/Personal Protection

No occupational exposure limits known.

#### **Advice on system design:**

Provide local exhaust ventilation to control vapours/mists.

#### **Personal protective equipment**

##### **Respiratory protection:**

Respiratory protection not required.

##### **Hand protection:**

Consult with glove manufacturer for testing data., Rubber gloves, Plastic gloves, Synthetic rubber gloves

##### **Eye protection:**

Safety glasses with side-shields.

##### **Body protection:**

light protective clothing

#### **General safety and hygiene measures:**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with the skin, eyes and clothing. Wash soiled clothing immediately.

---

# Safety Data Sheet

## Lupasol® FT P

Revision date : 2017/04/10

Version: 3.1

Page: 5/10

(30591992/SDS\_GEN\_US/EN)

### 9. Physical and Chemical Properties

|   |  |                          |
|---|--|--------------------------|
| Form:   | liquid   |                          |
| Odour:  | product specific   |                          |
| Odour threshold:                                    | No data available.   |                          |
| Colour:   | colourless to slightly yellow  |                          |
| pH value:   | approx. 12<br>( 100 g/l, 23 °C)  | (DIN ISO 976)            |
| solidification temperature:                         | approx. -10 °C   | (DIN ISO 3016)           |
| Boiling point:                                      | approx. 100 °C<br>( 1,013 hPa)   |                          |
| Sublimation point:                                  | No applicable information available.   |                          |
| Flash point:  | > 100 °C   | (DIN EN 22719; ISO 2719) |
| Flammability:                                       | not flammable  |                          |
| Lower explosion limit:                              | For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point. |                          |
| Upper explosion limit:                              | For liquids not relevant for classification and labelling.   |                          |
| Autoignition:                                       | > 200 °C   | (DIN 51794)              |
| Vapour pressure:                                    | No applicable information available.   |                          |
| <i>Information on: Water</i>                        |  |                          |
| Vapour pressure:                                    | 23.4 hPa<br>( 20 °C)<br>Literature data.   |                          |
| Density:  | approx. 1.08 g/cm3<br>( 20 °C)   | (DIN 51757)              |
| Relative density:                                   | No data available.   |                          |
| Vapour density:                                     | No data available.   |                          |
| Partitioning coefficient n-octanol/water (log Pow): | No data available.   |                          |
| Self-ignition temperature:                          | not self-igniting  |                          |
| Thermal decomposition:                              | No applicable information available.   |                          |
| Viscosity, dynamic:                                 | 18,000 - 40,000 mPa.s<br>( 20 °C)  | (DIN EN ISO 2555 (RV))   |
| Viscosity, kinematic:                               | No applicable information available.   |                          |
| Solubility in water:                                | ( 20 °C)<br>miscible   |                          |
| Solubility (quantitative):                          | No applicable information available.   |                          |
| Solubility (qualitative):                           | miscible<br>solvent(s): Water  |                          |
| Evaporation rate:                                   | No data available.   |                          |
| Other Information:                                  | If necessary, information on other physical and chemical parameters is indicated in this section.                            |                          |

### 10. Stability and Reactivity

#### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

No corrosive effect on metal.

# Safety Data Sheet

## Lupasol® FT P

Revision date : 2017/04/10  
Version: 3.1

Page: 6/10  
(30591992/SDS\_GEN\_US/EN)

Oxidizing properties:  
not fire-propagating

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

### Conditions to avoid

Avoid extreme heat.

### Incompatible materials

acids

### Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No applicable information available.

---

## 11. Toxicological information

### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

### Acute Toxicity/Effects

#### Acute toxicity

Assessment of acute toxicity: Harmful if swallowed.

#### Oral

Type of value: LD50

Species: rat (male/female)

Value: > 500 - < 2,000 mg/kg (OECD Guideline 423)

#### Inhalation

No applicable information available.

#### Dermal

No applicable information available.

#### Assessment other acute effects

No applicable information available.

#### Irritation / corrosion

Assessment of irritating effects: Not irritating to the skin. Eye contact causes irritation.

#### Skin

Species: rabbit

# Safety Data Sheet

## Lupasol® FT P

Revision date : 2017/04/10

Version: 3.1

Page: 7/10

(30591992/SDS\_GEN\_US/EN)

Result: non-irritant  
Method: OECD Guideline 404

### Eye

Species: rabbit  
Result: Irritant.  
Method: OECD Guideline 405

### Sensitization

Assessment of sensitization: Caused skin sensitization in animal studies.

Guinea pig maximization test  
Species: guinea pig  
Result: Caused skin sensitization in animal studies.  
Method: OECD Guideline 406

## Chronic Toxicity/Effects

### Repeated dose toxicity

Assessment of repeated dose toxicity: No data available.

### Genetic toxicity

Assessment of mutagenicity: The substance was not mutagenic in a test with mammals.

### Carcinogenicity

Assessment of carcinogenicity: No data available.

### Reproductive toxicity

Assessment of reproduction toxicity: No data available.

### Teratogenicity

Assessment of teratogenicity: No data available.

## Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

---

## 12. Ecological Information

### Toxicity

#### Aquatic toxicity

Assessment of aquatic toxicity:

Acutely toxic for aquatic organisms. Depending on local conditions and existing concentrations, disturbances in the biodegradation process of activated sludge are possible.

Acute effects on aquatic organisms are due to cationic charge, which is likely to be neutralized in natural water courses by anionic species.

#### Toxicity to fish

LC50 (96 h) 7.1 mg/l, Brachydanio rerio (OECD 203; ISO 7346; 92/69/EEC, C.1, static)  
Nominal concentration.

#### Aquatic invertebrates

EC50 (48 h) 8.84 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

# Safety Data Sheet

## Lupasol® FT P

Revision date : 2017/04/10  
Version: 3.1

Page: 8/10  
(30591992/SDS\_GEN\_US/EN)

Nominal concentration.

### Microorganisms/Effect on activated sludge

#### Toxicity to microorganisms

DIN EN ISO 8192-OECD 209-88/302/EEC,P. C activated sludge/EC20 (0.5 h): 60 mg/l

Depending on local conditions and existing concentrations, disturbances in the biodegradation process of activated sludge are possible.

### Persistence and degradability

#### Elimination information

approx. 50 - 60 % DOC reduction (28 d) (OECD Guideline 302 B) (aerobic, activated sludge, domestic) Moderately/partially eliminated from water.

### Bioaccumulative potential

#### Bioaccumulation potential

The product has not been tested.

### Mobility in soil

#### Assessment transport between environmental compartments

No data available.

### Additional information

Other ecotoxicological advice:

Do not allow to enter soil, waterways or waste water channels.

---

## 13. Disposal considerations

### **Waste disposal of substance:**

Must be disposed of or incinerated in accordance with local regulations.

### **Container disposal:**

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

RCRA: None

---

## 14. Transport Information

### **Land transport**

USDOT

Not classified as a dangerous good under transport regulations

### **Sea transport**

IMDG

Hazard class: 9

Packing group: III



# Safety Data Sheet

## Lupasol® FT P

Revision date : 2017/04/10

Version: 3.1

Page: 9/10

(30591992/SDS\_GEN\_US/EN)

|                       |   |
|-----------------------|---|
| ID number:            | UN 3082   |
| Hazard label:         | 9, EHSM   |
| Marine pollutant:     | YES   |
| Proper shipping name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,<br>N.O.S. (contains POLYETHYLENEIMINE) |

### Air transport

IATA/ICAO

|                       |   |
|-----------------------|---|
| Hazard class:         | 9   |
| Packing group:        | III   |
| ID number:            | UN 3082   |
| Hazard label:         | 9, EHSM   |
| Proper shipping name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,<br>N.O.S. (contains POLYETHYLENEIMINE) |

## 15. Regulatory Information

### Federal Regulations

#### Registration status:

Chemical TSCA, US released / listed

**EPCRA 311/312 (Hazard categories):** Acute;

#### CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

#### NFPA Hazard codes:

Health : 2 Fire: 0 Reactivity: 0 Special:

#### HMIS III rating

Health: 2 Flammability: 0 Physical hazard: 0

## 16. Other Information

#### SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2017/04/10

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

Lupasol® FT P is a registered trademark of BASF Corporation or BASF SE

# Safety Data Sheet

## Lupasol® FT P

Revision date : 2017/04/10

Page: 10/10

Version: 3.1

(30591992/SDS\_GEN\_US/EN)

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

END OF DATA SHEET