

# Safety Data Sheet

## Plurafac® LF 500

Revision date : 2018/02/05

Version: 3.1

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(30044065/SDS\_GEN\_US/EN)

### 1. Identification

#### Product identifier used on the label

#### Plurafac® LF 500

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

Recommended use\*: Chemical

Suitable for use in industrial sector: chemical industry

\* 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: non-ionic surfactants

Synonyms: alcohols, C12-C15 branched and linear, ethoxylated, propoxylated (polymer; starting materials listed in EINECS)

### 2. Hazards Identification

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

#### Classification of the product

Aquatic Acute 1

Aquatic Chronic 3

Hazardous to the aquatic environment - acute

Hazardous to the aquatic environment - chronic

#### Label elements

Pictogram:

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Signal Word:  
Warning

Hazard Statement:

H412 Harmful to aquatic life with long lasting effects.  
H400 Very toxic to aquatic life.

Precautionary Statements (Prevention):

P273 Avoid release to the environment.

Precautionary Statements (Response):

P391 Collect spillage.

Precautionary Statements (Disposal):

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

### Hazards not otherwise classified

#### Labeling of special preparations (GHS):

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 100 % dermal

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 100 % Inhalation - mist

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 100 % Inhalation - vapour

This surfactant complies with the biodegradability criteria as laid down in Regulation (EC)

No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request or at the request of a detergent manufacturer.

## 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>
120313-48-6	75.0 - 100.0%	alcohols, C12-C15, branched and linear, ethoxylated, propoxylated

## 4. First-Aid Measures

### Description of first aid measures

#### General advice:

Remove contaminated clothing.

#### If inhaled:

Keep patient calm, remove to fresh air.

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**If on skin:**

Wash thoroughly with soap and water.

**If in eyes:**

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

**If swallowed:**

Rinse mouth and then drink plenty of water.

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

Symptoms: No significant symptoms are expected due to the non-classification of the product.

**Indication of any immediate medical attention and special treatment needed**Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions).

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## 5. Fire-Fighting Measures

**Extinguishing media**

Suitable extinguishing media:  
water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:  
water jet

**Special hazards arising from the substance or mixture**

Hazards during fire-fighting:  
harmful vapours

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

**Advice for fire-fighters**

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

**Further information:**

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

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## 6. Accidental release measures

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

Use personal protective clothing. Keep people away and stay on the upwind side.

**Environmental precautions**

Do not discharge into drains/surface waters/groundwater.

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

For small amounts: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder).  
Dispose of absorbed material in accordance with regulations.

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For large amounts: Pump off product.  
Spills should be contained, solidified, and placed in suitable containers for disposal.

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## 7. Handling and Storage

### Precautions for safe handling

Protect against moisture. Shut containers immediately after taking product because product takes up the humidity of air.

Protection against fire and explosion:  
Take precautionary measures against static discharges.

### Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.  
Protect from temperatures below: -20 °C  
The product is not damaged by low temperatures or by frost.  
Protect from temperatures above: 70 °C  
Properties of the product change irreversibly on exceeding the limit temperature.

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## 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:

Wear respiratory protection if ventilation is inadequate. Breathing protection if breathable aerosols/dust are formed.

#### Hand protection:

Chemical resistant protective gloves

#### Eye protection:

Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

#### General safety and hygiene measures:

Wearing of closed work clothing is required additionally to the stated personal protection equipment. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin and eyes. Take off immediately all contaminated clothing.

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## 9. Physical and Chemical Properties

Form:	liquid
Odour:	product specific, offensive
Odour threshold:	No data available.
Colour:	colourless to yellowish
pH value:	approx. 7 ( 50 g/l, 23 °C)

(DIN EN 1262)

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solidification temperature:	approx. -20 °C	(DIN 51583)
onset of boiling:	approx. 100 °C	
Flash point:	> 200 °C	(DIN 51758)
Flammability:	not self-igniting	
Autoignition:	> 200 °C	(DIN 51794)
Vapour pressure:	< 0.1 hPa ( 20 °C)	
Density:	0.97 g/cm3 ( 20 °C)	(DIN 51757)
Relative density:	No data available.	
Vapour density:	not determined	
Self-ignition temperature:	not self-igniting	
Thermal decomposition:	> 300 °C	
Viscosity, dynamic:	approx. 60 mPa.s ( 23 °C) 65 mPa.s ( 23 °C)	
Particle size:	The substance / product is marketed or used in a non solid or granular form.	
Solubility in water:	insoluble	
Miscibility with water:	not (e.g. <10%)	
Solubility (qualitative):	soluble	
	solvent(s): petroleum spirit, Ethanol	
Evaporation rate:	No data available.	

## 10. Stability and Reactivity

### Reactivity

Corrosion to metals:  
No corrosive effect on metal.

Oxidizing properties:  
not fire-propagating

### Chemical stability

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

Peroxides: The product does not contain peroxides.

### Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.  
The product is chemically stable.

### Conditions to avoid

Avoid humidity. See MSDS section 7 - Handling and storage.

### Incompatible materials

caustics, halogens, Alkalines, acids, reactive chemicals

### Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:  
> 300 °C

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## 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: Virtually nontoxic after a single ingestion.

#### Oral

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

#### Inhalation

Type of value: LC50

Species: rat

not determined

#### Dermal

Type of value: LD50

Species: rat

not determined

#### Assessment other acute effects

No data available.

#### Skin

Species: rabbit

Result: non-irritant

Method: OECD Guideline 404

#### Eye

Species: rabbit

Result: non-irritant

Method: OECD Guideline 405

#### Sensitization

Assessment of sensitization: No data available.

The product has not been tested.

#### Aspiration Hazard

No aspiration hazard expected.

### Chronic Toxicity/Effects

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### Repeated dose toxicity

Assessment of repeated dose toxicity: No data available.

### Genetic toxicity

Assessment of mutagenicity: No valid studies concerning mutagenic properties are available.

### Carcinogenicity

Assessment of carcinogenicity: No reliable data was available concerning carcinogenic activity.  
Experimental/calculated data: No data available.

### Reproductive toxicity

Assessment of reproduction toxicity: No reliable data are available concerning reproduction toxicity.

### Teratogenicity

Assessment of teratogenicity: No reliable data was available concerning teratogenicity.

## Symptoms of Exposure

No significant symptoms are expected due to the non-classification of the product.

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## 12. Ecological Information

### Toxicity

#### Aquatic toxicity

Assessment of aquatic toxicity:

Very toxic (acute effect) to aquatic organisms. Harmful to aquatic life with long lasting effects.  
The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

#### Toxicity to fish

LC50 (96 h) 0.1 - 1 mg/l, *Leuciscus idus*

#### Aquatic invertebrates

EC50 (48 h) 0.1 - 1 mg/l

#### Aquatic plants

EC50 (72 h) 0.1 - 1 mg/l

#### Chronic toxicity to fish

No data available.

#### Chronic toxicity to aquatic invertebrates

No observed effect concentration (21 d) > 0.1 - < 1 mg/l, *Daphnia magna*

## Microorganisms/Effect on activated sludge

#### Toxicity to microorganisms

bacterium/EC10 (0.5 h): > 10,000 mg/l

## Persistence and degradability

#### Assessment biodegradation and elimination (H2O)

Readily biodegradable (according to OECD criteria).

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### Elimination information

>= 90 % Bismuth-active substance (mod. OECD 303A)

### **Mobility in soil**

#### Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is possible.

### **Additional information**

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

Add. remarks environm. fate & pathway:

Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other ecotoxicological advice:

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

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## 13. Disposal considerations

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

Dispose of in accordance with national, state and local regulations. Do not discharge into drains/surface waters/groundwater.

### **Container disposal:**

Uncontaminated packaging can be re-used. Packs that cannot be cleaned should be disposed of in the same manner as the contents.

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## 14. Transport Information

### **Land transport**

USDOT

Hazard class:	9
Packing group:	III
ID number:	UN 3082
Hazard label:	9, EHSM
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains FATTY ALCOHOL ALCOXYLATE)

### **Sea transport**

IMDG

Hazard class:	9
Packing group:	III
ID number:	UN 3082
Hazard label:	9, EHSM
Marine pollutant:	YES
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains FATTY ALCOHOL ALCOXYLATE)



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### 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, N.O.S. (contains FATTY ALCOHOL ALCOXYLATE)

## 15. Regulatory Information

### Federal Regulations

#### Registration status:

Chemical TSCA, US released / listed

**EPCRA 311/312 (Hazard categories):** Refer to SDS section 2 for GHS hazard classes applicable for this product.

#### EPCRA 313:

CAS Number  
75-21-8

Chemical name  
Ethylene Oxide

CERCLA RQ  
100 LBS  
10 LBS

<u>CAS Number</u>	<u>Chemical name</u>
75-56-9; 123-91-1	Propylene oxide; 1,4-dioxane
75-21-8	Ethylene Oxide

#### Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

**WARNING:** This product can expose you to chemicals including ETHYLENE OXIDE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

[Other Prop 65 components may be present in the product.]

#### NFPA Hazard codes:

Health: 1 Fire: 1 Reactivity: 0 Special:

#### HMIS III rating

Health: 1 Flammability: 1 Physical hazard: 0

## 16. Other Information

#### SDS Prepared by:

BASF NA Product Regulations  
SDS Prepared on: 2018/02/05

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operations on society and the environment during production, storage, transport, use and disposal of our products.

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