

## Safety Data Sheet

According to Regulation (EC) No. 1907/2006 as amended from time to time

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

**1.1 Product identifier:**

**Product name: Plurafac® LF 400, 655001 Wachs-Ex, Wax remover, 2 liter**

Chemical name: Alcohols, C12-15 branched and linear, ethoxylated, propoxylated  
CAS Number: 120313-48-6

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

**1.3 Details of the supplier of the safety data sheet:**

**Manufacturer/ Supplier:**

Wassermann Dental-Maschinen GmbH  
Rudorffweg 15-17  
21031 Hamburg  
Germany

**Phone.:** +49 (0) 40 73 09 26 -20/ -24  
**Fax:** +49 (0) 40 70 03 724

[export@wassermann-dental.com](mailto:export@wassermann-dental.com)  
[www.wassermann.hamburg](http://www.wassermann.hamburg)

**1.4 Emergency telephone number:** +49 (0) 40 73 09 26-21

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### SECTION 2: Hazards Identification

**2.1. Classification of the substance or mixture**

According to Regulation (EC) No 1272/2008 [CLP]

Skin Corr./Irrit. 2  
Eye Dam./Irrit. 1

Aquatic Acute 1  
Aquatic Chronic 3

M-factor acute: 1

H318, H315, H412, H400

For the classifications not written out in full in this section the full text can be found in section 16.

## 2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]

Pictogram:



Signal Word:  
Danger

Hazard Statement:

H318	Causes serious eye damage.
H315	Causes skin irritation.
H412	Harmful to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.

Precautionary Statements (Prevention):

P280	Wear protective gloves and eye/face protection.
P273	Avoid release to the environment.
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.
P310	Immediately call a POISON CENTER or doctor/physician.
P303 + P362	IF ON SKIN (or hair): Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P391	Collect spillage.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
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Labeling of special preparations (GHS):

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.

According to Regulation (EC) No 1272/2008 [CLP]

Hazard determining component(s) for labelling: ALCOHOL, C12/C15, ETHOXYLATED, PROPOXYLATED

### 2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

No specific dangers known, if the regulations/notes for storage and handling are considered.

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## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

#### Chemical nature

alcohols, C12-C15, branched and linear, ethoxylated, propoxylated  
CAS Number: 120313-48-6

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

### 3.2. Mixtures

Not applicable

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## SECTION 4: First-Aid Measures

### 4.1. Description of first aid measures

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

On skin contact:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:  
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

#### **4.2. 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.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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### **SECTION 5: Fire-Fighting Measures**

#### **5.1. Extinguishing media**

Suitable extinguishing media:  
water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:  
water jet

#### **5.2. Special hazards arising from the substance or mixture**

harmful vapours, carbon oxides  
Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

#### **5.3. Advice for fire-fighters**

Special protective equipment:  
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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### **SECTION 6: Accidental Release Measures**

High risk of slipping due to leakage/spillage of product. Forms slippery surfaces with water.

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

Use personal protective clothing. Information regarding personal protective measures see, section 8.

#### **6.2. Environmental precautions**

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Do not allow contamination of public drains or surface or ground waters. Inform local water plc if spillage enters drains and the Environment Agency (England & Wales), the Scottish Environmental Protection Agency (Scotland), or the Environment and Heritage Service (Northern Ireland) if it enters surface or ground waters. Keep people and animals away.

### 6.3. Methods and material for containment and cleaning up

For large amounts: Dike spillage. Pump off product.  
For residues: Pick up with suitable absorbent material.  
Dispose of absorbed material in accordance with regulations.

### 6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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## SECTION 7: Handling and Storage

### 7.1. Precautions for safe handling

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.

### 7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

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.

### 7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control parameters

#### Components with occupational exposure limits

No occupational exposure limits known.

### 8.2. Exposure controls

#### Personal protective equipment

Respiratory protection:  
Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

**Hand protection:**

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):

nitrile rubber (NBR) - 0.4 mm coating thickness

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

**Eye protection:**

Tightly fitting safety goggles (cage goggles) (e.g. EN 166) and face shield.

**Body protection:**

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

**General safety and hygiene measures**

Wearing of closed work clothing is required additionally to the stated personal protection equipment.

No eating, drinking, smoking or tobacco use at the place of work. Handle in accordance with good industrial hygiene and safety practice.

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## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

Form:	liquid	
Colour:	colourless to yellowish	
Odour:	product specific	
Odour threshold:		
pH value:	No data available. approx. 7 (50 g/l, 23 °C)	(DIN EN 1262)
solidification temperature:	approx. 0 °C	(DIN ISO 2207)
Boiling point:		
Flash point:	not applicable > 100 °C	(DIN 51758)
Evaporation rate:		
Flammability:	No data available. 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.	
Ignition temperature:	> 200 °C	(DIN 51794)
Vapour pressure:	< 0.1 hPa (20 °C)	
Density:	approx. 0.97 g/cm <sup>3</sup> (23 °C)	(DIN 51757)
Relative density:	No data available.	
Relative vapour density (air):	not determined	
Solubility in water:	soluble (25 °C)	
Solubility (qualitative) solvent(s):	petroleum spirit, ethanol; ethyl alcohol, propan-2-ol; isopropyl alcohol; isopropanol	
Partitioning coefficient n-octanol/water (log Kow):	soluble	
Self ignition:	not determined not self-igniting	
Thermal decomposition:	> 300 °C	
Viscosity, dynamic:	70 mPa.s (23 °C)	
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	

## 9.2. Other information

Miscibility with water:	miscible in all proportions
Surface tension:	No data available.
Grain size distribution:	The substance / product is marketed or used in a non solid or granular form.
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section., none

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## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

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

Corrosion to metals: Corrosive effects to metal are not anticipated.

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

### 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

Substances to avoid:

caustics, halogens, Alkalines, acids, reactive chemicals

### 10.6. Hazardous decomposition products

Hazardous decomposition products:

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

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## SECTION 11: Toxicological Information

### 11.1. Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): > 2,000 mg/kg

LD50 rat (dermal): > 2,000 mg/kg

#### Irritation

Assessment of irritating effects:

Skin contact causes irritation. May cause severe damage to the eyes.

Experimental/calculated data:

Skin corrosion/irritation rabbit: Irritant. (BASF-Test)

Serious eye damage/irritation rabbit: irreversible damage (BASF-Test)

#### Respiratory/Skin sensitization

Assessment of sensitization:

No data available.

#### Germ cell mutagenicity

Assessment of mutagenicity:



The substance was not mutagenic in bacteria.

Experimental/calculated data:

Ames-test  
negative

#### Carcinogenicity

Assessment of carcinogenicity:  
No data available.

#### Reproductive toxicity

Assessment of reproduction toxicity:  
No data available.

#### Developmental toxicity

Assessment of teratogenicity:  
No data available.

#### Specific target organ toxicity (single exposure)

Remarks: No data available.

#### Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:  
No data available.

#### Aspiration hazard

No aspiration hazard expected.

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## SECTION 12: Ecological Information

### 12.1. Toxicity

Assessment of aquatic toxicity:

Very toxic (acute effect) to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Toxicity to fish:

LC50 (96 h) > 0.1 - < 1 mg/l, *Brachydanio rerio* (OECD 203; ISO 7346; 84/449/EEC, C.1)

Aquatic invertebrates:

EC50 (48 h) > 1 - < 10 mg/l (Directive 79/831/EEC)

Aquatic plants:  
EC50 (72 h) > 0.1 - < 1 mg/l, Scenedesmus subspicatus (OECD Guideline 201)  
acute Effect

EC10 > 0.1 - < 1 mg/l, Scenedesmus subspicatus  
long-term effect

Microorganisms/Effect on activated sludge:  
EC10 > 1,000 mg/l, Pseudomonas putida

Chronic toxicity to fish:  
No data available.

Chronic toxicity to aquatic invertebrates:  
No data available.

Assessment of terrestrial toxicity:  
No data available concerning terrestrial toxicity.

## 12.2. Persistence and degradability

Assessment biodegradation and elimination (H2O):  
Readily biodegradable (according to OECD criteria).

Elimination information:  
>= 90 % Bismuth-active substance (OECD 301 A (new version))

> 60 % CO2 formation relative to the theoretical value (28.000000 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C)

## 12.3. Bioaccumulative potential

Bioaccumulation potential:  
Accumulation in organisms is not to be expected.

## 12.4. Mobility in soil

Assessment transport between environmental compartments:  
Volatility: The substance will not evaporate into the atmosphere from the water surface.  
Adsorption in soil: Adsorption to solid soil phase is possible.

## 12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

## 12.6. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

## 12.7. Additional information

Sum parameter

Chemical oxygen demand (COD): 2,215 mg/g

Biochemical oxygen demand (BOD): 310 mg/g

Biochemical oxygen demand (BOD) Incubation period 30 d: 1,700 mg/g

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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## SECTION 13: Disposal Considerations

### 13.1. Waste treatment methods

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

The UK Environmental Protection (Duty of Care) Regulations (EP) and amendments should be noted (United Kingdom).

This product and any uncleaned containers must be disposed of as hazardous waste in accordance with the 2005 Hazardous Waste Regulations and amendments (United Kingdom)

Contaminated packaging:  
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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## SECTION 14: Transport Information

### Land transport

ADR

UN number                      UN3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (contains FATTY ALCOHOL ALCOXYLATE)  
Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes  
Special precautions for user: Tunnel code: E

RID

UN number: UN3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (contains FATTY ALCOHOL ALCOXYLATE)  
Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes  
Special precautions for user: None known

Inland waterway transport

ADN

UN number: UN3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (contains FATTY ALCOHOL ALCOXYLATE)  
Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes  
Special precautions for user: None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

UN number: UN 3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (contains FATTY ALCOHOL ALCOXYLATE)  
Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes  
Marine pollutant: YES  
Special precautions for user: None known

## Air transport

IATA/ICAO

UN number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains FATTY ALCOHOL ALCOXYLATE)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

### **14.1. UN number**

See corresponding entries for "UN number" for the respective regulations in the tables above.

### **14.2. UN proper shipping name**

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

### **14.3. Transport hazard class(es)**

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

### **14.4. Packing group**

See corresponding entries for "Packing group" for the respective regulations in the tables above.

### **14.5. Environmental hazards**

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

### **14.6. Special precautions for user**

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

### **14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

### **Further information**

This product is subject to the most recent edition of "The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations" and their amendments (United Kingdom).

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## SECTION 15: Regulatory Information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

The data should be considered when making any assessment under the Control of Substances Hazardous to Health Regulations (COSHH), and related guidance, for example, 'COSHH Essentials' (United Kingdom).

This product is classified under the European CLP Regulation. (United Kingdom)

This product may be subject to the Control of Major Accident Hazards Regulations (COMAH), and amendments if specific threshold tonnages are exceeded (United Kingdom).

### 15.2. Chemical Safety Assessment

Chemical Safety Assessment not required

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## SECTION 16: Other Information

### Assessment of the hazard classes according to UN GHS criteria (most recent version)

M-factor acute: 1

This product is of industrial quality and unless otherwise specified or agreed intended exclusively for industrial use. This includes the mentioned and recommended usage. Any other intended applications should be discussed with the manufacturer. In particular this concerns the application for products that are the object of special standards and regulations.

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
Aquatic Acute	Hazardous to the aquatic environment - acute
Aquatic Chronic	Hazardous to the aquatic environment - chronic
H318	Causes serious eye damage.
H315	Causes skin irritation.
H412	Harmful to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.

If you have any queries relating to this MSDS, its contents or any other product safety related questions, please write to the following e-mail address: [product-safety-north@basf.com](mailto:product-safety-north@basf.com)

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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