

Material Safety Data Sheet

According to 91/155 EC

Printing date 13.10.2003

Reviewed on 13.10.2003

1 Identification of substance:

· **Product details:**

· **Trade name:** *Illuminé Office 30 % Liquid*

· **Application of the substance / the preparation** *Tooth whitening gel*

· **Manufacturer/Supplier:**

DENTSPLY DeTrey GmbH

De-Trey-Str. 1

D-78467 Konstanz

GERMANY

Tel.:

+49-7531-583-0

Fax:

+49-7531-583-104

· **Further information obtainable from:**

- *Departement Analytical Research / Research & Development for* *technical information*

- *Departement Marketing & Sales for distribution of the safety data* *sheets*

2 Composition/Data on components:

· **Chemical characterization**

· **Description:** *Mixture of substances listed below with nonhazardous additions.*

· **Dangerous components:**

<i>CAS: 7722-84-1</i>	<i>hydrogen peroxide solution</i>	<i>C, O; R 8-34</i>	<i>25-50%</i>
<i>EINECS: 231-765-0</i>			

· **Additional information** *For the wording of the listed risk phrases refer to section 16.*

3 Hazard identification

· **Hazard description:**

C Corrosive

O Oxidising

· **Information concerning to particular hazards to man and environment**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 8 Contact with combustible material may cause fire.

R 34 Causes burns.

· **Classification system**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

4 First aid measures

· **General information** *Immediately remove any clothing soiled by the product.*

· **After skin contact** *Immediately rinse with water*

· **After eye contact** *Rinse opened eye for several minutes under running water. Then consult a doctor.*

· **After swallowing**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

5 Fire fighting measures

· **Suitable extinguishing agents**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Protective equipment:** *Wear self-contained respiratory protective device*

· **Additional information** *Cool endangered receptacles with water spray.*

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(Contd. on page 2)

Material Safety Data Sheet

According to 91/155 EC

Printing date 13.10.2003

Reviewed on 13.10.2003

Trade name: *Illuminé Office 30 % Liquid*

(Contd. of page 1)

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:** Dilute with plenty of water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling** Product is intended for dental use only.
- **Information for safe handling:**
Observe normal care for working with chemicals.
Keep away from heat and direct sunlight.
Open and handle receptacle with care.
Store in cool, dry place in tightly closed receptacles.
- **Information about fire - and explosion protection:**
Traces of flammable substances may collect in the steam chamber of enclosed systems. Keep clear of ignition sources.
Protect from heat.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.
Store away from foodstuffs.
Store away from flammable substances.
Store away from metals.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Protect from exposure to the light.
Store in the dark.
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
- **Maximum storage temperature:** 8 °C
- **Minimum storage temperature** 2 °C

8 Exposure controls and personal protection gear

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

7722-84-1 hydrogen peroxide solution

OES	Short-term value: 2.8 mg/m ³ , 2 ppm
	Long-term value: 1.4 mg/m ³ , 1 ppm

- **Additional information:** The lists valid during the making were used as basis.

- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

(Contd. on page 3)

Material Safety Data Sheet

According to 91/155 EC

Printing date 13.10.2003

Reviewed on 13.10.2003

Trade name: Illuminé Office 30 % Liquid

(Contd. of page 2)

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Safety glasses

· **Body protection:** Protective work clothing.

9 Physical and chemical properties:

· **General Information**

Form:	Fluid
Colour:	Colourless
Odour:	Odourless

· **Change in condition**

Melting point/Melting range: undetermined

Boiling point/Boiling range: 107°C

· **Flash point:** Not applicable

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Vapour pressure at 20°C:** 23 hPa

· **Density at 20°C:** 1.11 g/cm³

· **Solubility in / Miscibility with**

Water: Soluble

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

To avoid thermal decomposition do not overheat.

· **Dangerous reactions**

No dangerous reactions known

Reacts with various metals

Acts as an oxidizing agent on organic materials such as wood, paper and fats

May produce violent reactions with bases and numerous organic substances including alcohols and amines

· **Dangerous decomposition products:** Oxygen

11 Toxicological information

· **Acute toxicity:**

· **Primary irritant effect:**

· **on the skin:** Caustic effect on skin and mucous membranes.

· **on the eye:** Strong caustic effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

Corrosive

(Contd. on page 4)

Material Safety Data Sheet

According to 91/155 EC

Printing date 13.10.2003

Reviewed on 13.10.2003

Trade name: Illuminé Office 30 % Liquid

(Contd. of page 3)

Swallowing will lead to a burning respectively to a caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

12 Ecological information:

· **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

13 Disposal considerations

· **Product:**

· **Recommendation**



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· **Land transport ADR/RID (cross-border)**



· **ADR/RID class:** 5.1 (OC1) Oxidizing substances.

· **Danger code (Kemler):** 58

· **UN-Number:** 2014

· **Packaging group:** II

· **Hazard label** 5.1+8

· **Description of goods:** 2014 Hydrogen peroxide, aqueous solution

· **Maritime transport IMDG:**



· **IMDG Class:** 5.1

· **UN Number:** 2014

· **Label** 5.1 + 8

· **Packaging group:** II

· **EMS Number:** 5.1-02

· **Marine pollutant:** No

· **Proper shipping name:** HYDROGEN PEROXIDE, AQUEOUS SOLUTION

(Contd. on page 5)

Material Safety Data Sheet

According to 91/155 EC

Printing date 13.10.2003

Reviewed on 13.10.2003

Trade name: *Illuminé Office 30 % Liquid*

(Contd. of page 4)

· **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** 5.1
- **UN/ID Number:** 2014
- **Label** 5.1 + 8
- **Packaging group:** II
- **Proper shipping name:** HYDROGEN PEROXIDE, AQUEOUS SOLUTION

15 Regulations

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

· **Code letter and hazard designation of product:**

C Corrosive
O Oxidising

· **Hazard-determining components of labelling:**

hydrogen peroxide solution

· **Risk phrases:**

- 8 Contact with combustible material may cause fire.
- 34 Causes burns.

· **Safety phrases:**

- 3 Keep in a cool place.
- 17 Keep away from combustible material.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 60 This material and its container must be disposed of as hazardous waste.

· **National regulations**

- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant R-phrases**

- 34 Causes burns.
- 8 Contact with combustible material may cause fire.

· **Department issuing MSDS:** Analytical Research

- **Contact:** HotLine for urgent technical support: +49-7531-583-333

Material Safety Data Sheet

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1 Identification of substance:

· **Product details:**

- **Trade name:** *Illuminé Office Powder*
- **Application of the substance / the preparation:** *Tooth whitening gel*

· **Manufacturer/Supplier:**

DENTSPLY DeTrey GmbH
 De-Trey-Str. 1
 D-78467 Konstanz
 GERMANY
 Tel.:
 Fax:

+49-7531-583-0
 +49-7531-583-104

· **Further information obtainable from:**

- *Departement Analytical Research / Research & Development for technical information*
- *Departement Marketing & Sales for distribution of the safety data sheets*

2 Composition/Data on components:

· **Chemical characterization**

- **Description:** *Mixture of substances listed below with nonhazardous additions.*

· **Dangerous components:**

CAS: 13463-67-7	titanium dioxide	≤ 2.5%
EINECS: 236-675-5		

- **Additional information:** *For the wording of the listed risk phrases refer to section 16.*

3 Hazard identification

- **Hazard description:** *not applicable*

· **Information concerning to particular hazards to man and environment**

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· **Classification system**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

4 First aid measures

- **General information:** *No special measures required.*
- **After inhalation:** *Supply fresh air.*
- **After skin contact:** *Generally the product does not irritate the skin.*
- **After eye contact:** *Rinse opened eye for several minutes under running water.*
- **After swallowing:** *Rinse out mouth and then drink plenty of water.*

5 Fire fighting measures

· **Suitable extinguishing agents**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Special hazards caused by the substance, its products of combustion or resulting gases:**

Formation of toxic gases is possible during heating or in case of fire.

- **Protective equipment:** *Wear self-contained respiratory protective device*

6 Accidental release measures

- **Person-related safety precautions:** *Avoid formation of dust.*
- **Measures for environmental protection:** *No special measures required.*
- **Measures for cleaning/collecting:** *Pick up mechanically.*

(Contd. on page 2)

Material Safety Data Sheet

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Trade name: *Illuminé Office Powder*

(Contd. of page 1)

· **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling** Product is intended for dental use only.
- **Information for safe handling:** Observe normal care for working with chemicals.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls and personal protection gear

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

· General Information

Form:	Powder
Colour:	White
Odour:	Characteristic

· Change in condition

Melting point/Melting range: undetermined
Boiling point/Boiling range: undetermined

· **Flash point:** Not applicable

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

(Contd. on page 3)

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(Contd. of page 2)

· Density:	Not determined
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· Solubility in / Miscibility with Water:	Insoluble
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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous decomposition products:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
 The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
 When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information:

- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· Land transport ADR/RID (cross-border)	
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· ADR/RID class:	-
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· Maritime transport IMDG:	
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· IMDG Class:	-
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· Marine pollutant:	No
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· Air transport ICAO-TI and IATA-DGR:	
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· ICAO/IATA Class:	-
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15 Regulations

- **Labelling according to EU guidelines:**
 Observe the general safety regulations when handling chemicals
 The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

(Contd. on page 4)

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Trade name: Illuminé Office Powder

(Contd. of page 3)

- **National regulations**
- **Waterhazard class:** Generally not hazardous for water.

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Analytical Research
- **Contact:** HotLine for urgent technical support: +49-7531-583-333

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