

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Dentosol orange liquid

Revision date: 09.05.2017

Product code: 00320-0032GHS

Page 1 of 9

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

### 1.1. Product identifier

Dentosol orange liquid

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

#### Use of the substance/mixture

Cleaning oil

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

Company name:	Müller-Omicron GmbH & Co. KG		
Street:	Schlosserstr. 1		
Place:	51789 Lindlar		
Telephone:	+49 (0) 2266/4742-0	Telefax:	+49 (0) 2266/3417
e-mail:	info@mueller-omicron.de		
Responsible Department:	Responsible for the safety data sheet: sds@gbk-ingelheim.de		

**1.4. Emergency telephone number:** INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)  
England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24  
24

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 3

Aspiration hazard: Asp. Tox. 1

Skin corrosion/irritation: Skin Irrit. 2

Respiratory or skin sensitisation: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Flammable liquid and vapour.

May be fatal if swallowed and enters airways.

Causes skin irritation.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

#### Regulation (EC) No. 1272/2008

#### Hazard components for labelling

Orange terpenes

**Signal word:** Danger

#### Pictograms:



#### Hazard statements

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H304	May be fatal if swallowed and enters airways.
H411	Toxic to aquatic life with long lasting effects.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Dentosol orange liquid

Revision date: 09.05.2017

Product code: 00320-0032GHS

Page 2 of 9

#### Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P273	Avoid release to the environment.
P501	Dispose of contents/container to approved disposal company or local collection.

#### 2.3. Other hazards

Vapours may form explosive mixture with air.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

Orange peel oil

##### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
8028-48-6	Orange terpenes			> 90 %
	232-433-8		01-2119493353-35	
	Flam. Liq. 3, Skin Irrit. 2, Skin Sens. 1, Asp. Tox. 1, Aquatic Chronic 2; H226 H315 H317 H304 H411			

Full text of H and EUH statements: see section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Remove contaminated soaked clothing immediately.  
If you feel unwell, seek medical advice.

##### After inhalation

Move to fresh air in case of accidental inhalation of vapours.  
In the event of symptoms refer for medical treatment.

##### After contact with skin

Wash with water and soap as a precaution.  
Consult a doctor if skin irritation persists.

##### After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
If eye irritation persists, consult a specialist.

##### After ingestion

Do not induce vomiting.  
Rinse out mouth and give plenty of water to drink.  
Never give anything by mouth to an unconscious person.  
Consult a physician.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Dentosol orange liquid

Revision date: 09.05.2017

Product code: 00320-0032GHS

Page 3 of 9

Induce vomiting only upon the advice of a physician.

#### **4.2. Most important symptoms and effects, both acute and delayed**

Causes serious eye irritation.  
May cause an allergic skin reaction.  
May be fatal if swallowed and enters airways.

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

Treat symptoms.

### SECTION 5: Firefighting measures

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

##### **Suitable extinguishing media**

Foam, carbon dioxide (CO<sub>2</sub>), dry chemical, water-spray.

##### **Unsuitable extinguishing media**

Full water jet.

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

Fire may produce:  
carbon monoxide and carbon dioxide

#### **5.3. Advice for firefighters**

Use breathing apparatus with independent air supply.  
Protective suit.

#### **Additional information**

Cool containers at risk with water spray jet.  
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

### SECTION 6: Accidental release measures

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

In case of vapour formation use respirator.  
Ensure adequate ventilation.  
Use personal protective clothing.  
Keep away sources of ignition.

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

Do not discharge into the drains/surface waters/ground water.

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

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).  
Shovel into suitable container for disposal.

#### **6.4. Reference to other sections**

Observe protective instructions (see Sections 7 and 8).  
Information for disposal see section 13.

### SECTION 7: Handling and storage

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Keep tightly closed.  
Use only in thoroughly ventilated areas.

##### **Advice on protection against fire and explosion**

Do not smoke - volatile.  
Keep product and empty container away from heat and sources of ignition.  
Vapour/air mixture is explosive, even in empty uncleaned receptacles.

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Dentosol orange liquid

Revision date: 09.05.2017

Product code: 00320-0032GHS

Page 4 of 9

#### Requirements for storage rooms and vessels

- Keep container tightly closed in a dry, cool and well-ventilated place.
- Keep only in original container.
- Recommended storage temperature: 10 - 27°C

#### Advice on storage compatibility

- Incompatible with oxidizing agents.

#### Further information on storage conditions

- Keep away from food, drink and animal feeding stuffs.

#### 7.3. Specific end use(s)

- Cleaning oil

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Additional advice on limit values

- No data available.

#### 8.2. Exposure controls

##### Appropriate engineering controls

- Ensure adequate ventilation, especially in confined areas.
- Pay attention to explosion protection guidelines.

##### Protective and hygiene measures

- Do not inhale vapours.
- Wash hands before breaks and immediately after handling the product.
- When using do not eat, drink or smoke.
- Remove and wash contaminated clothes before re-use.

##### Eye/face protection

- Safety goggles with side protection (EN 166).

##### Hand protection

- Also suitable are gloves made of:
  - Nitrile rubber/nitrile latex - NBR (0,35 mm)
  - Fluoro-rubber - FKM (0.4 mm)
- This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.
- Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

##### Skin protection

- Long sleeved clothing (EN 368).

##### Respiratory protection

- In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 14387).

### SECTION 9: Physical and chemical properties

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

Physical state:	Liquid
Colour:	Colourless
Odour:	Lemonish

#### Test method

##### Changes in the physical state

Initial boiling point and boiling range:	170 - 180 °C
Flash point:	46 - 51 °C

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Dentosol orange liquid

Revision date: 09.05.2017

Product code: 00320-0032GHS

Page 5 of 9

Lower explosion limits:	0,7 vol. %
Upper explosion limits:	6,1 vol. %
Ignition temperature:	approx. 255 °C
Density (at 20 °C):	0,84 - 0,86 g/cm <sup>3</sup>
Water solubility: (at 20 °C)	Immiscible

#### **9.2. Other information**

No data available.

### **SECTION 10: Stability and reactivity**

#### **10.1. Reactivity**

No decomposition if stored and applied as directed.

#### **10.2. Chemical stability**

Stable under normal conditions.

#### **10.3. Possibility of hazardous reactions**

Reactions with oxidizing agents.

#### **10.4. Conditions to avoid**

Vapour/air mixtures are explosive at intensive warming.

Heating can release vapours which can be ignited.

#### **10.5. Incompatible materials**

oxidizing agents

#### **10.6. Hazardous decomposition products**

No hazardous decomposition products known.

Fire may produce:

Carbon monoxide and carbon dioxide

### **SECTION 11: Toxicological information**

#### **11.1. Information on toxicological effects**

##### **Acute toxicity**

Based on available data, the classification criteria are not met.

Orange terpenes

LD50/oral/rat: 4400 mg/kg

LD50/dermal/rabbit: > 2000 mg/kg

##### **Irritation and corrosivity**

Causes skin irritation.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

##### **Sensitising effects**

May cause an allergic skin reaction. (Orange terpenes)

##### **Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

##### **STOT-single exposure**

Based on available data, the classification criteria are not met.

##### **STOT-repeated exposure**

Based on available data, the classification criteria are not met.

##### **Aspiration hazard**

May be fatal if swallowed and enters airways. (Orange terpenes)

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Dentosol orange liquid

Revision date: 09.05.2017

Product code: 00320-0032GHS

Page 6 of 9

#### Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

#### Practical experience

#### Other observations

Contact with eyes may cause irritation.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecological data are not available.

Toxic to aquatic life with long lasting effects.

#### 12.2. Persistence and degradability

Not readily biodegradable.

#### 12.3. Bioaccumulative potential

No data available.

#### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

#### 12.6. Other adverse effects

Hazardous water pollutant.

#### Further information

Ecological injuries are not known or expected under normal use.

Do not flush into surface water or sanitary sewer system.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Advice on disposal

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

##### Waste disposal number of waste from residues/unused products

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

##### Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the product.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

14.1. UN number: UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Orange terpenes)

14.3. Transport hazard class(es): 3

14.4. Packing group: III

Hazard label: 3

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Dentosol orange liquid

Revision date: 09.05.2017

Product code: 00320-0032GHS

Page 7 of 9



Classification code: F1  
 Limited quantity: 5 L / 30 kg  
 Excepted quantity: E1  
 Transport category: 3  
 Hazard No: 30  
 Tunnel restriction code: D/E

### Inland waterways transport (ADN)

**14.1. UN number:** UN 1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Orange terpenes)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Classification code: F1  
 Limited quantity: 5 L / 30 kg  
 Excepted quantity: E1

### Marine transport (IMDG)

**14.1. UN number:** UN 1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Orange oil)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Marine pollutant: Yes  
 Limited quantity: 5 L / 30 kg  
 Excepted quantity: E1  
 EmS: F-E, S-E

### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** UN 1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Orange oil)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Limited quantity Passenger: 10 L  
 Passenger LQ: Y344  
 Excepted quantity: E1  
 IATA-packing instructions - Passenger: 355  
 IATA-max. quantity - Passenger: 60 L

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Dentosol orange liquid

Revision date: 09.05.2017

Product code: 00320-0032GHS

Page 8 of 9

IATA-packing instructions - Cargo:

366

IATA-max. quantity - Cargo:

220 L

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes



#### 14.6. Special precautions for user

Take the usual precautions when handling with chemicals.

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

The transport takes place only in approved and appropriate packaging.

### SECTION 15: Regulatory information

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

##### EU regulatory information

2004/42/EC (VOC): 0 %

##### National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D): 2 - water contaminating

#### 15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

### SECTION 16: Other information

#### Changes

Changes in chapter: 2, 4, 12, 14

#### Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
 IMDG = International Maritime Code for Dangerous Goods  
 IATA/ICAO = International Air Transport Association / International Civil Aviation Organization  
 MARPOL = International Convention for the Prevention of Pollution from Ships  
 IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 REACH = Registration, Evaluation, Authorization and Restriction of Chemicals  
 CAS = Chemical Abstract Service  
 EN = European norm  
 ISO = International Organization for Standardization  
 DIN = Deutsche Industrie Norm  
 PBT = Persistent Bioaccumulative and Toxic  
 vPvB = Very Persistent and very Bio-accumulative  
 LD = Lethal dose  
 LC = Lethal concentration  
 EC = Effect concentration  
 IC = Median immobilisation concentration or median inhibitory concentration



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Dentosol orange liquid

Revision date: 09.05.2017

Product code: 00320-0032GHS

Page 9 of 9

#### Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

#### Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*