



## **Safety Data Sheet (SDS)**

**Version:** 1.0

**Preparation Date:** 20 June 2015

# **1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE UNDERTAKING**

## **1.1 Product identifiers**

Product name: iDentOz Denture Marking Sealing Liquid

Product number: DMK001

Contains: poly(methyl methacrylate) dissolved in ethyl acetate and 2-Butanone

Brand: iDentOz

## **1.2 Other means of identification**

Poly(methacrylic acid methyl ester)

PMMA

Methyl ethyl ketone

MEK

Ethyl methyl ketone

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

Identified uses: Sealing liquid used as a protective coating over markings applied to dentures

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

Business: iDentOz

7D 16 Bligh Place NSW 2031

AUSTRALIA

Telephone: +61 432 766 938

## **1.5 Emergency telephone number**

Emergency Phone: +61 432 766 938

## 2 HAZARDS IDENTIFICATION


### 2.1 GHS Classification

Flammable liquids (Category 2)

Eye irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3), Central nervous system

### 2.2 GHS Label elements, including precautionary statements

<b>Pictogram</b>	
<b>Signal word</b>	Danger
<b>Hazard statement(s)</b>	
H225	Highly flammable liquid and vapour
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
<b>Precautionary statement(s)</b>	
<i>Prevention</i>	
P210	Keep away from heat/sparks/open flames/hot surfaces - No smoking
P233	Keep container tightly closed
P261	Avoid breathing vapours
P280	Wear protective gloves and eye protection
<i>Response</i>	
P303 + P361 + P353	IF ON SKIN (or hair): Rinse skin with water.
P304 + P340 + P312	IF INHALED: Remove victim to fresh air at rest in a position comfortable for breathing
P312	Call a POISON CENTER or doctor/ physician if you feel unwell
P337 + P313	If eye irritation persists: Get medical advice/ attention
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
<i>Storage</i>	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
<b>Disposal</b>	
P501	Dispose of contents/ container to an approved waste disposal plant

### 2.3 Other hazards

Repeated exposure may cause skin dryness or cracking.

### 3 Composition/Information on Ingredients

#### 3.1 Substances

##### 3.1.1 Ethyl acetate

Formula: C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>

Molecular weight: 88.11 g/mol

##### 3.1.2 2-Butanone

Synonyms: Methyl ethyl ketone, MEK, Ethyl methyl ketone

Formula: C<sub>4</sub>H<sub>8</sub>O

Molecular weight: 72.11 g/mol

##### 3.1.3 Poly(methyl methacrylate)

Synonyms: Poly(methacrylic acid methyl ester), PMMA

Formula: [CH<sub>2</sub>C(CH<sub>3</sub>)(CO<sub>2</sub>CH<sub>3</sub>)]<sub>n</sub>

Component	Classification	Concentration
Poly(methyl methacrylate)	No components need to be disclosed according to the applicable regulations.	10-<20%
Ethyl acetate	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336	50-<60%
Ethyl methyl ketone	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336	30-<40%

For the full text of the H-Statements mentioned in this Section, see Section 16.

## **4 First Aid Measures**

### **4.1 Description of first aid measures**

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

#### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### **If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

## **5 Fire-fighting Measures**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides

Flash back possible over considerable distance. Container explosion may occur under fire conditions.

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

Wear self-contained breathing apparatus for fire fighting if necessary.

### **5.4 Further Information**

Use water spray to cool unopened containers.

## **6 Accidental Release Measures**

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

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

### **6.2 Environmental Precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### **6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

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

For disposal see section 13.

## **7 Handling and Storage**

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

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.  
Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers, which are opened, must be carefully resealed and kept upright to prevent leakage.  
Storage class (TRGS 510): Flammable liquids

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

Apart from the uses mentioned in section 1.3 no other specific.

## 8 Exposure controls/Personal Protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Component	CAS No.	Value	Control Parameters	Basis
Ethyl acetate	141-78-6	STEL	400 ppm 1,400 mg/m <sup>3</sup>	Australia. Workplace Exposure Standards for Airborne Contaminants.
		TWA	200 ppm 720 mg/m <sup>3</sup>	
Ethyl methyl ketone	78-93-3	STEL	300 ppm 890 mg/m <sup>3</sup>	Australia. Workplace Exposure Standards for Airborne Contaminants.
		TWA	150 ppm 445 mg/m <sup>3</sup>	Australia. Workplace Exposure Standards for Airborne Contaminants.
PMMA	Contains no substances with occupational exposure limit values			

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the working day.

Use only in a well ventilated area.

#### Personal Protective Equipment

##### Eye and face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as AS 1336 & AS 1337 (Australia), NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with PVC or nitrile gloves. Gloves must be inspected prior to use. Use proper glove removal technique, i.e. without touching glove's outer surface, to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

		Sealing liquid	Ethyl acetate	MEK	PMMA
a)	Appearance	Clear, colourless viscous liquid	Clear, colourless liquid	Clear, colourless liquid	White powder
b)	Odour	No data available	No data available	No data available	Odourless
c)	Odour Threshold	No data available	No data available	No data available	No data available
d)	pH	No data available	No data available	No data available	No data available
e)	Melting point/freezing point	No data available	-84.0°C	-87.0°C	No data available
f)	Initial boiling point and boiling range	No data available	76.5 – 77.5°C - lit	80°C – lit	No data available
g)	Flash point	-4°C	-2.99°C – closed cup	-3°C – closed cup	>250°C – closed cup
h)	Evaporation rate	No data available	No data available	No data available	No data available
i)	Flammability (solid, gas)	No data available	May form explosive dust-air mixture	No data available	No data available
j)	Upper/lower flammability or explosive limits	No data available	Upper explosion limit: 11.5% (V) Lower explosion limit: 2.2% (V)	Upper explosion limit: 10.1% (V) Lower explosion limit: 1.8% (V)	No data available
k)	Vapour pressure	No data available	97.3 hPa at 20.0°C	95 hPa at 20°C	No data available
l)	Vapour density	No data available	No data available	2.49 (Air = 1.0)	No data available
m)	Relative density	No data available	0.90 g/cm <sup>3</sup> at 20°C	0.805g/mL at 25°C	1.200 g/cm <sup>3</sup> at 20°C
n)	Water solubility	Insoluble	Soluble	Soluble	Insoluble
o)	Partition coefficient: n-octanol/water	No data available	log Pow: 0.73	log Pow: 0.29	No data available
p)	Auto-ignition temperature	425°C	427.0°C	No data available	304°C
q)	Decomposition temperature	No data available	No data available	No data available	No data available
r)	Viscosity	No data available	No data available	No data available	No data available
s)	Explosive properties	No data available	No data available	No data available	No data available
t)	Oxidizing properties	No data available	No data available	No data available	No data available

### 9.2 Other safety information

No data available.



## **10 Stability and reactivity**

### **10.1 Reactivity**

No data available

### **10.2 Chemical stability**

Stable under recommended storage conditions

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

No data available

### **10.4 Conditions to avoid**

Heat, flames and sparks

### **10.5 Incompatible materials**

Strong oxidizing agents, strong reducing agents, strong acids

### **10.6 Hazardous decomposition products**

Other decomposition products – no data available  
In the event of fire see section 5

## 11 Toxicological information

### 11.1 Information on toxicological effects

Toxicological effect	Sealing liquid	Ethyl acetate	MEK	PMMA
Acute toxicity	No data available	LD50 Oral - Rat - 5,620 mg/kg LC50 Inhalation - Mouse - 2 h - 45,000 mg/m <sup>3</sup> LD50 Dermal - Rabbit - > 18,000 mg/kg	LD50 Oral – rat – 2,737 mg/kg LC50 Inhalation – mammal – 38,000 mg/m <sup>3</sup> LD50 Dermal – rabbit – 6,480 mg/kg	No data available
Skin corrosion/irritation	No data available	May cause skin irritation and/or dermatitis.	Skin - rabbit Result: No skin irritation (OECD Test Guideline 404)	No data available
Serious eye damage/eye irritation	No data available	No data available	Eyes - rabbit Result: Irritating to eyes. (OECD Test Guideline 405)	No data available
Respiratory or skin sensitisation	No data available	No data available	No data available	No data available
Germ cell mutagenicity	No data available	No data available	No data available	No data available
Carcinogenicity	No data available	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.	IARC: 3 – Group 3: not classifiable as to its carcinogenicity to humans (2-Propenoic acid, 2-methyl-,methyl ester, homopolymer)
Reproductive toxicity	No data available		No data available	No data available
Specific target organ toxicity – single exposure	No data available	May cause drowsiness or dizziness.	May cause drowsiness or dizziness.	No data available
Specific target organ toxicity – repeated exposure	No data available	No data available	No data available	No data available
Aspiration hazard	No data available	No data available	No data available	No data available
Additional Information	To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated	RTECS: AH5425000 Inhalation of high concentrations may cause: Headache, Drowsiness, Dizziness, Vomiting, narcosis, anaemia, Central nervous system depression Kidney - Irregularities - Based on Human Evidence	RTECS: EL6475000 Central nervous system depression, Gastrointestinal disturbance, narcosis Liver - Irregularities - Based on Human Evidence	RTECS: TR0400000 To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated

## 12 Ecological information

	Ethyl acetate	MEK	PMMA
<b>12.1 Ecotoxicity</b>			
- Toxicity to fish	LC50 - Oncorhynchus mykiss (rainbow trout) - 350.00 - 600.00 mg/l - 96 h LC50 - Pimephales promelas (fathead minnow) - 220.00 - 250.00 mg/l - 96 h	Mortality NOEC - Cyprinodon variegatus (sheepshead minnow) - 400 mg/l - 96h LC50 - Pimephales promelas (fathead minnow) - 3,130 - 3,320 mg/l - 96 h	No data available
- Toxicity to Daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 2,300.00 - 3,090.00 mg/l - 24 h LC50 - Daphnia magna (Water flea) - 560 mg/l - 48 h	LC50 - Daphnia magna (Water flea) - > 520 mg/l - 48h EC50 - Daphnia magna (Water flea) - 7,060 mg/l - 24h	No data available
- Toxicity to algae	EC50 - Algae - 4,300.00 mg/l - 24h	No data available	No data available
<b>12.2 Persistence and degradability</b>			
-Biodegradability	Result: 79 % - Readily biodegradable. (OECD Test Guideline 301D)	No data available	No data available
<b>12.3 Bioaccumulative potential</b>			
Bioaccumulation	- 3 d Bioconcentration factor (BCF): 30	No data available	No data available
<b>12.4 Mobility in soil</b>	No data available	No data available	No data available
<b>12.5 Results of PBT and vPvB assessment</b>	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
<b>12.6 Other adverse effects</b>	No data available	No data available	No data available

## 13 Disposal considerations

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated Packaging

Dispose of as unused product.

## 14 Transport Information

### 14.1 UN Number

UN number per ADG code: 1993

### 14.2 UN proper shipping name

“UN 1993 FLAMMABLE LIQUID, N.O.S. (contains ETHYL ACETATE and ETHYL METHYL KETONE), 3, PG II”.

### 14.3 Transport hazard class(es)

FLAMMABLE LIQUID N.O.S Class 3 per the ADG code

### 14.4 Packaging group

Packing Group II per the ADG code

### 14.5 Environmental Hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA-DGR: no

### 14.6 Special precautions for user

No data available

### 14.7 Hazchem or Emergency Action Code

Placard to display:



## 15 Regulatory Information

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

#### Standard for the Uniform Scheduling of Medicines and Poisons

No data available

#### Carcinogen classification under WHS Regulation 2011, Schedule 10

Not listed

#### Notification status

**AICS:** On the inventory, or in compliance with the inventory

**DSL:** All components of this product are on the Canadian DSL.

**ENCS:** On the inventory, or in compliance with the inventory

**IECSC:** On the inventory, or in compliance with the inventory

**ISHL:** On the inventory, or in compliance with the inventory  
**KECI:** On the inventory, or in compliance with the inventory  
**NZIoC:** On the inventory, or in compliance with the inventory  
**PICCS:** On the inventory, or in compliance with the inventory

## 16 Other Information

### Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquids
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
STOT SE	Specific target organ toxicity - single exposure

### Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. iDentOz shall not be held liable for any damage resulting from handling or from contact with the above product.

**End of SDS**