

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

- **1.1 Product identifier**
- **Trade name: LIQUID A**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
 No further relevant information available.
- **Application of the substance / the mixture** Material for dental use
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 Dental Manufacturing S.p.a.  
 Via Cà Mignola Nuova, 1699  
 45021 - Badia Polesine (RO) - Italy  
 Tel. +39 0425 51628 - Fax +39 0425 590156
- **Further information obtainable from:** [info@ruthinium.it](mailto:info@ruthinium.it)
- **1.4 Emergency telephone number:** Dental Manufacturing S.p.a. - Tel. +39 0425 51628 (Office Hours)

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 health hazard

STOT SE 1 H370 Causes damage to organs.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
 The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02



GHS06



GHS08

- **Signal word** *Danger*
- **Hazard-determining components of labelling:**  
*methanol*

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**· Hazard statements**

- H225 *Highly flammable liquid and vapour.*  
 H301+H311+H331 *Toxic if swallowed, in contact with skin or if inhaled.*  
 H370 *Causes damage to organs.*

**· Precautionary statements**

- 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.*  
 P270 *Do not eat, drink or smoke when using this product.*  
 P312 *Call a POISON CENTER/doctor if you feel unwell.*  
 P302+P352 *IF ON SKIN: Wash with plenty of water.*  
 P403+P233 *Store in a well-ventilated place. Keep container tightly closed.*

**· 2.3 Other hazards****· Results of PBT and vPvB assessment**




- **PBT:** Not applicable.  
 · **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

**· 3.2 Chemical characterisation: Mixtures**

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

**· Dangerous components:**

CAS: 67-56-1	methanol	< 80%
EINECS: 200-659-6	 <i>Flam. Liq. 2, H225;</i>  <i>Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331;</i>  <i>STOT SE 1, H370</i>	

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

### SECTION 4: First aid measures

**· 4.1 Description of first aid measures****· General information:**

- Immediately remove any clothing soiled by the product.*  
*In case of irregular breathing or respiratory arrest provide artificial respiration.*

**· After inhalation:**

- Supply fresh air or oxygen; call for doctor.*  
*In case of unconsciousness place patient stably in side position for transportation.*

**· After skin contact:** *Immediately wash with water and soap and rinse thoroughly.***· After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.***· After swallowing:** *Do not induce vomiting; call for medical help immediately.***· 4.2 Most important symptoms and effects, both acute and delayed**

*No further relevant information available.*

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

*Medical supervision for at least 48 hours.*

### SECTION 5: Firefighting measures

**· 5.1 Extinguishing media****· Suitable extinguishing agents:**

*CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.*

**· For safety reasons unsuitable extinguishing agents:** *Water with full jet*

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- **5.2 Special hazards arising from the substance or mixture**  
Can form explosive gas-air mixtures.  
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Keep away from ignition sources.  
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **6.2 Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.  
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb liquid components with liquid-binding material.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

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

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- **8.1 Control parameters**

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

<b>67-56-1 methanol</b>	
WEL	Short-term value: 333 mg/m <sup>3</sup> , 250 ppm Long-term value: 266 mg/m <sup>3</sup> , 200 ppm Sk

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

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

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:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- **Protection of hands:**



Protective gloves

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:**



Tightly sealed goggles

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:**

Fluid

**Colour:**

Colourless

- **Odour:**

Like alcohol

- **Odour threshold:**

Not determined.

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· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	- 98 °C
<b>Boiling point/Boiling range:</b>	64 °C
· <b>Flash point:</b>	11 °C
· <b>Ignition temperature:</b>	455 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	5,5 Vol %
<b>Upper:</b>	44,0 Vol %
· <b>Vapour pressure at 20 °C:</b>	128 hPa
· <b>Density at 20 °C:</b>	0.79 - 0.8 g/cm <sup>3</sup>
· <b>Relative density at 20 °C</b>	0.79 - 0.8
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Soluble.
· <b>Partition coefficient (n-octanol/water):</b>	- 0.77 log POW
· <b>Viscosity:</b>	
<b>Dynamic at 25 °C:</b>	0.544 - 0.599 mPas
<b>Kinematic:</b>	Not determined.
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid**  
The product is normally supplied in a stabilized form. Avoid excessive heat for long periods of time, the product can polymerize. Avoid heat, flames and other sources of ignition
- **10.5 Incompatible materials:** Avoid contact with acids and oxidants.
- **10.6 Hazardous decomposition products:**  
When heated or in case of fire can release gases and vapors which are dangerous to health.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**  
Toxic if swallowed, in contact with skin or if inhaled.

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- **LD/LC50 values relevant for classification:**

- **67-56-1 methanol**

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**  
Causes damage to organs.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** Easily biodegradable
- **12.3 Bioaccumulative potential** Non significant accumulation in organisms
- **12.4 Mobility in soil** No further relevant information available.
- **Additional 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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **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.

### SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN1230

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· **14.2 UN proper shipping name**  
 · **ADR** 1230 METHANOL  
 · **IMDG** METHANOL  
 · **IATA** Methanol

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 3 Flammable liquids.  
 · **Label** 3+6.1

· **IMDG**



· **Class** 3 Flammable liquids.  
 · **Label** 3/6.1

· **IATA**



· **Class** 3 Flammable liquids.  
 · **Label** 3 (6.1)

· **14.4 Packing group**

· **ADR, IMDG, IATA** II

· **14.5 Environmental hazards:**

· **Marine pollutant:** No

· **14.6 Special precautions for user**

Warning: Flammable liquids.

· **Danger code (Kemler):** 336

· **EMS Number:** F-E,S-D

· **Stowage Category** B

· **Stowage Code** SW2 Clear of living quarters.

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)** 1L

· **Excepted quantities (EQ)** Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **Transport category** 2

· **Tunnel restriction code** D/E

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- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul> | <p>1L<br/>Code: E2<br/>Maximum net quantity per inner packaging: 30 ml<br/>Maximum net quantity per outer packaging: 500 ml</p> |
| <ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>  | <p>UN 1230 METHANOL, 3 (6.1), II</p>  |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **Labelling according to Regulation (EC) No 1272/2008 GHS label elements**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** methanol, hydrogen chloride
- **Seveso category**  
H2 ACUTE TOXIC  
P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 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. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.*

- **Relevant phrases**  
H225 Highly flammable liquid and vapour.  
H301 Toxic if swallowed.  
H311 Toxic in contact with skin.  
H331 Toxic if inhaled.  
H370 Causes damage to organs.
- **Contact:** ---
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Flam. Liq. 2: Flammable liquids, Hazard Category 2

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*Acute Tox. 3: Acute toxicity, Hazard Category 3**STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1**· \* **Data compared to the previous version altered.***

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