



## Safety data sheet according to Regulation (EU) 2020/878

**Product designation:** NOVOsin Liquids

**Version:** 2024-09-22

**Replayed Version:** 2021-11-08

### **Section 1: Identification of the substance/mixture and of the company**

#### **1.1 Product identifier**

Substance name Trade name: NOVOsin Liquids  
Article number starting: F09 / UDI 763029670009P

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

Relevant identified uses:

Mixture for the fabrication of prosthetic restorations

Uses advised against:

All applications that deviate from the identified use

#### **1.3 Details of the supplier providing the safety data sheet**

**Manufacturer / Supplier**

NOVODENT Ets.

**Street/PO Box**

Industriestrasse 32

**Nat. no./Postal code/City**

Liechtenstein - 9487 - Bendern

**Contact point for technical information**

NOVODENT Ets.

**Phone / Fax / E-Mail**

+423 377 1500 / -09 / E-Mail: msds@novodent.com

#### **1.4 Emergency phone number**

+423 377 1500 (Novodent Ets.)  
+41 44 251 51 51 oder 145 (Tox-Zentrum)

### **Section 2: Potential hazards**

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

Classification according to Regulation (EC) No 1272/2008

Skin.sens. H317, Eye irrit. H319, Skin irrit. H315, respiratory irrit. H335, Liq.2. H225

#### **2.2 Labelling elements**

**Labelling elements according to Regulation (EC) No 1272/2008**

**Pictogram:**



**Signal word:** Danger

**Hazard-determining components for labelling**

**contains:** Methylmethacrylat



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### Hazard information:

H315 May cause skin irritation  
H317 May cause allergic skin reactions  
H319 Causes severe eye irritation  
H335 May cause respiratory irritation  
H225 Highly flammable liquid and vapour

### Safety information:

P101 Keep out of the reach of children.  
P280 Wear protective gloves / clothing / eye protection / face protection.  
P262 Do not get in eyes, on skin or on clothing.  
P261 Avoid breathing dust/fume/gas/mist/vapour/aerosol.  
P501 Dispose of contents/container in accordance with local regulations.  
P210 Keep away from heat/sparks/open flames/hot surfaces. Do not smoke  
P352 *Wash/shower skin with water*  
P305 In case of contact with eyes:  
P351 *Take off immediately all contaminated, soaked clothing.*  
P338 *Remove any contact lenses if possible and continue rinsing.*  
P273 *Avoid release into the environment*

### Further labelling elements

No

## 2.3 Other dangers

PBT or vPvB. Indeterminate, mixture.  
May polymerise on excessive heating.

## Section 3: Composition/information on ingredients

### 3.1 Substances

This product is a mixture as listed under 3.2.

### 3.2 Mixtures

Substance Name: Methylmethacrylat

EC-Nr.: CAS-No. : 80-62-6 Index-No.: REACH Registration No.:

Content : 94 %

Classification according to Regulation (EC) No 1272/2008:

Skin.Sens. H317, respiratory.irrit. H335, Skin.irrit H315, Flam. Liq.2. H225

Substance Name: Butandiol dimethacrylat

EC No.: CAS No. : 82339-26-2 Index No.: REACH Registration No.:

Content : 5 %

Classification according to Regulation (EC) No 1272/2008:

Skin.irrit. H315, Eye.irrit. H319, Skin.sens. H335, Stot.se 3

Substance Name: Dimethyl-p-toluidin

EC No.: CAS No. : 99978 Index No.: REACH Registration No.:

Content : < 1 %

Classification according to Regulation (EC) No 1272/2008:

Ak.tox.3.inh.dem.oral H331, Chron.H20.att.3 H412<sup>3</sup>



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(For the wording of the listed hazard statements see section 16 and 2.2)

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### **Section 4: First aid measures**

#### **4.1 Description of the first aid measure**

##### **After inhalation**

Provide plenty of fresh air and consult a doctor if symptoms persist.

##### **After skin contact**

Wash off with soap and water and rinse well. Consult a doctor if skin irritation persists.

##### **Nach Augenkontakt**

Remove contact lenses. Rinse immediately under running water for several minutes with the eyelids open.  
Consult a doctor if symptoms persist.

##### **After swallowing**

Rinse out mouth and drink plenty of water. Avoid vomiting and consult a doctor if symptoms persist.

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

None known.

#### **4.3 Indications for immediate medical help or special treatment**

None known.

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### **Section 5: Fire-fighting measures**

#### **5.1 Extinguishing agent**

Suitable: CO<sub>2</sub>, extinguishing powder or water spray. In the case of larger fires, use water spray or alcohol-resistant foam.

Unsuitable: Full water jet, high-pressure water jet

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

None known.

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

In case of fire, cool the container with water spray.

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### **Section 6: Accidental release measures**

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

Use protective equipment according to section 8.

#### **6.2 Environmental protection measures**

Do not allow to enter drains/surface waters/groundwater.

#### **6.3 Methods and material for retention and cleaning**



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Absorb with liquid-binding materials (sand, diatomaceous earth, acid binders, universal binders, sawdust) and ensure adequate ventilation.

### 6.4 Reference to other sections

Protective measures under point 7 and 8.

## **Section 7: Handling and storage**

### **7.1 Protective measures for safe handling**

#### **Measures to protect against fire and explosions**

Avoid skin contact by keeping a safe distance or wearing suitable protective clothing.  
Avoid wearing suitable protective clothing. Keep away from sources of ignition - do not smoke and take measures against electrostatic charging.

#### **Measures to prevent dusts and aerosols**

Always keep the container closed.

#### **Measures to protect the environment**

Prevent product and large quantities of contaminated wash water from entering water and soil.  
avoid. Cover sewage systems to prevent product from entering the sewage system.

#### **General hygiene measures**

Do not eat, drink or smoke in areas where work is being done.  
- Wash hands after use.  
- Remove contaminated clothing and protective equipment before entering areas where food is being where food is consumed

### **7.2 Conditions for safe storage taking into account incompatibilities**

#### **Information on storage conditions**

2 °C - 30 °C | 35.6 °F - 86 °F (because of quality)

#### **Requirements for storage rooms and containers**

Store only in the original container in a cool place protected from light. Equipment in the vicinity should be EX protected.

Storage class: 3 highly flammable

### **7.3 Specific end uses**

#### **Industry and sector-specific guidelines**

For further information, please refer to our instructions for use

## **Section 8: Exposure controls / Personal protective equipment**

### **8.1 Parameters to be monitored**

#### **Occupational exposure limit values and/or biological limit values**

#### **Occupational exposure limit values (OELs) Germany**



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| Methylmetacrylat CAS 80-62-6 |                                                                                                                                 |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| MAK (Switzerland)            | Short-term value 420 E mg/m <sup>3</sup> 100 ml/m <sup>3</sup><br>Long-term value 210 E mlg/m <sup>3</sup> 50 ml/m <sup>3</sup> |
| MAK (Austria)                | Short-term value 420 E mg/m <sup>3</sup> 100 ml/m <sup>3</sup><br>Long-term value 210 E mlg/m <sup>3</sup> 50 ml/m <sup>3</sup> |
| AGW (Germany)                | 210 mg/m <sup>3</sup> 50ml/m <sup>3</sup><br>2(I); DFG, EU, Y                                                                   |

### 8.2 Exposure controls and monitoring

#### Suitable technical control devices

No further information, see point 7.

#### Individual protective measures - personal protective equipment

##### Eye / face protection

Use safety goggles with side shields according to EN 166:2001. In areas of possible exposure risk, provide eye wash facilities and safety showers be provided.

##### Skin protection

###### Gloves

Latex gloves are not suitable

###### Prolonged exposure:

Glove material: Nitrile rubber (NBR)

Layer thickness (mm): Layer thickness 0.56 mm

Penetration time (min.): >480

###### Short-term exposure:

Glove material: Nitrile rubber (NBR)

Layer thickness (mm): Layer thickness 0.10 mm

Penetration time (min.): >30

##### Other skin protection

Wear protective gloves. Recommendations are listed below. Other protective materials may be used depending on the user's risk assessment. Skin protection creams can help protect exposed skin, but should not be applied after exposure has occurred.

##### Respiratory protection



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In case of short or low exposure use respiratory filter device; in case of intensive or prolonged exposure use self-contained breathing apparatus.

Recommended filter device for short-term use:

Filter A1  
Filter A2  
Filter A3

### Heat / cold protection

Observe storage conditions according to GBA. Keep away from light and heat sources.

### Limitation and monitoring of environmental exposure

No information available.

## **Section 9: Physical and chemical properties**

### **9.1 Information on the basic physical and chemical properties**

|                                                |                                        |
|------------------------------------------------|----------------------------------------|
| Appearance                                     |                                        |
| - State of aggregation:                        | Liquid                                 |
| - Colour :                                     | Clear light yellow                     |
| Smell :                                        | Characteristic ester-like              |
| Smell threshold :                              | No data available                      |
| pH value :                                     | Undetermined                           |
| Melting point/freezing point :                 | - 48°C (- 54°F)                        |
| Initial boiling point and boiling range :      | 101°C (213°F)                          |
| Flash point :                                  | 10 °C (50 °F) Cleveland                |
| Evaporation rate :                             | Not determined                         |
| Flammability (solid, gas) :                    | No data available                      |
| Upper/lower flammability or explosion limits : | The product is not explosive           |
| Vapour pressure :                              | 47 hPa @ 20°C (68°F)                   |
| Vapour density :                               | Not applicable                         |
| relative density :                             | 0,943 g/cm <sup>3</sup> on 20°C (68°F) |
| Solubility(s) :                                | 1,6g/L on 20°C (68°F)                  |
| Partition coefficient:                         | Not determined                         |
| n-octanol/water :                              | Not determined                         |
| Auto-ignition temperature :                    | The product is not self-igniting       |
| Decomposition temperature :                    | Not determined                         |
| Viscosity :                                    | Not determined                         |
| explosive properties :                         | None                                   |

### **9.2 Other details**

|                               |                |
|-------------------------------|----------------|
| % Volatile substances (wt.%): | Not determined |
| Volatile organic compounds:   | Not determined |
| Solvent content organic:      | Not determined |
| Solids content                | Not determined |

## **Section 10: Stability and reactivity**



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### 10.1 Reactivity

No dangerous reactions known.

### 10.2 Chemical stability

The product is chemically stable under normal ambient conditions (room temperature).

### 10.3 Possibility of hazardous reactions

Formation of explosive gas mixtures with air. Reactions with strong oxidising agents. Polymerisation with evolution of heat.

### 10.4 Conditions to be avoided

Heating. A range from approx. 15 Kelvin below the flash point is considered critical. Exposure to light.

### 10.5 Incompatible materials

Avoid initiators that produce free radicals and contact with peroxides. Rubber and various plastics.

### 10.6 Hazardous decomposition products

None under normal storage and handling conditions.

## Section 11: Toxicological information

### 11.1 Data on toxicological effects

**acute toxicity**  
Oral Irritates the mucous membranes.  
Dermal Irritates the skin.  
Inhalation Not classified, Based on available data, the classification criteria are not met.

#### **Corrosive/irritant effect on the skin**

Irritates the skin and mucous membranes.

#### **Serious eye damage/irritation**

No eye irritation

#### **Sensitisation of the**

- Respiratory tract
- Skin

Causes sensitisation

May cause allergic skin reactions.

#### **Germ cell mutagenicity**

None

#### **Carcinogenicity**

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

#### **Reproductive toxicity**

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

#### **Specific target organ toxicity after a single exposure**

Inhalation - May cause respiratory irritation.

#### **Specific target organ toxicity in case of repeated exposure**

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

#### **Aspiration risk**

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

### **TOXICITY DATA**

#### **Acute toxicity**

|            |        |               |               |            |
|------------|--------|---------------|---------------|------------|
| Oral       | Rat    | Akute LD50    | 7.872 mg/kg   | Literature |
| Dermal     | Rabbit | Akute LD50    | > 5.000 mg/kg | Literature |
| Inhalation | Mouse  | Sensitisation |               | Literature |

#### **Local effect on skin and eyes**

|                  |        |              |                    |            |
|------------------|--------|--------------|--------------------|------------|
| Acute irritation | Dermal | Rabbit       | Irritating to skin | Literature |
| Acute irritation | Eye    | Mouse (LLNA) | No eye irritation  | Literature |



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### Allergic sensitisation

|               |             |               |            |
|---------------|-------------|---------------|------------|
| Sensitisation | Skin        | Sensitisation | Literature |
| Sensitisation | Respiration | Sensitisation | Literature |

### Other information

Toxicity data are from studies funded by raw material manufacturers or from generally available literature. Prolonged or repeated skin or mucous membrane contact of non-polymerised material may cause irritation symptoms.

### Symptoms and effects (delayed and chronic) with information on routes of exposure. also: information on toxicokinetics, metabolism and distribution

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

## Section 12: Environmental information

### 12.1 Toxicity

Water hazard class 1 (list classification):

Slightly water-repellent  
Do not allow to enter waters or drains.

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Soil mobility

No data available

### 12.5 Result of the PBT and vPvB assessment

unspecified

### 12.6 Other harmful effects

No data available

## Section 13: Notes on disposal

### 13.1 Waste treatment process

#### Treatment of contaminated packaging

Dispose of to a controlled landfill or incineration line in accordance with local regulations.

### Waste code according to the List of Wastes Ordinance (AVV)

150110 Hazardous waste

### Special precautionary measures

None

### Relevant EU or other regulations

No data available





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### Section 14: Transport information

#### 14.1 UN-Number

UN 1247

#### 14.2 Proper UN shipping name

##### ADR/RID

UN1247 METHYLMETHYCRYLAT MONOMER, STABILIZED

##### IMDG-Code / ICAO-TI / IATA-DGR

UN1247 METHYLMETHYCRYLAT MONOMER, STABILIZED

#### 14.3 Transport hazard classes

##### ADR/RID



**Class:** Flammable liquid substances

**Hazard label:** 3

##### Transport/further information

|                          |         |
|--------------------------|---------|
| Limited quantity (LQ)    | 1L      |
| Excepted quantities (EQ) | Code E2 |
| Transport category       | 2       |
| Tunnel restriction code  | D/E     |
| Packing group            | 2       |

##### IMDG



**Klasse:** Flammable liquid substances

**Gefahrenzettel:** 3

##### Transport/further information

|                          |         |
|--------------------------|---------|
| Limited quantity (LQ)    | 1L      |
| Excepted quantities (EQ) | Code E2 |
| Transport category       | 2       |
| Tunnel restriction code  | D/E     |

##### IATA



**Klasse:** Flammable liquid substances

**Gefahrenzettel:** 3

##### Transport/further information

None

#### 14.4 Packaging group

II (substances with medium danger)

#### 14.5 Environmental hazards



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### Indicator for environmentally hazardous substances

ADR/RID / IMDG-Code / ICAO-TI / IATA-DGR: ☐ Yes / ☒ No

Marine Pollutant: ☐ Yes / ☒ No

### 14.6 Special precautions for the user

Always follow the instructions for use.

### 14.7 Carriage in bulk in accordance with Annex II of the MARPOL Convention and the IBC Code

Not applicable

## Section 15: Legislation

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

Regulation (EC) No 2037/2000 (substances that deplete the ozone layer):

Not applicable

Regulation (EC) No 850/2004 (persistent organic pollutants):

Not applicable

Regulation (EC) No 689/2008 (export and import of dangerous chemicals):

Not applicable

Regulation (EC) No 648/2004 (Detergents Regulation):

Not applicable

Restrictions under Title VIII of Regulation (EC) No 1907/2006:

Not applicable

### National regulations

#### Water hazard class

Water quality class 2 (list classification)

### 15.2 Chemical Safety Assessment

The mixture has not been subjected to a safety assessment.

## Section 16: Other information

### Changes compared to the last version

Transfer to new software, toxicological values taken from literature.

### Abkürzungen

|         |                                                                                     |
|---------|-------------------------------------------------------------------------------------|
| ADR     | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| AwSV    | Ordinance on Installations for the Handling of Substances Hazardous to Water        |
| BImSchV | Ordinance on the Implementation of the Federal Immission Control Act                |
| CAS     | Chemical Abstracts Service                                                          |
| DIN     | Standard of the German Institute for Standardisation                                |
| EC      | Effective concentration                                                             |
| EG      | European Community                                                                  |
| EN      | European Standard                                                                   |



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|           |                                                                                                     |
|-----------|-----------------------------------------------------------------------------------------------------|
| IATA-DGR  | International Air Transport Association-Dangerous Goods Regulations                                 |
| IBC Code  | International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk |
| ICATO-TI  | International Civil Aviation Organization-Technical Instructions                                    |
| IMDG-Code | International Maritime Code for Dangerous Goods                                                     |
| ISO       | Standard of the International Standards Organization                                                |
| IUCLID    | International Uniform Chemical Information Database                                                 |
| LC        | Lethal concentration                                                                                |
| LD        | Lethal dose                                                                                         |
| Log Kow   | Partition coefficient between octanol and water                                                     |
| MARPOL    | Maritime Pollution Convention = Convention for the Prevention of Pollution from Ships               |
| OECD      | Organisation for Economic Co-operation and Development                                              |
| PBT       | Persistent, bioaccumulative, toxic                                                                  |
| RID       | Regulations concerning the International Carriage of Dangerous Goods by Rail                        |
| TRGS      | Technical regulations for hazardous substances                                                      |
| UN        | United Nations                                                                                      |
| VOC       | Volatile Organic Compounds (VOCs)                                                                   |
| vPvB      | Very persistent and very bioaccumulative                                                            |
| VwVwS     | Administrative regulation on substances hazardous to water                                          |
| WGK       | Water hazard class                                                                                  |

### References and data sources

#### Regulations

REACH Regulation (EC) No 1907/2006, as last amended by Regulation (EU) 2018/675

CLP Regulation (EC) No 1272/2008, as last amended by Regulation (EU) 2018/669

#### Internet

<http://www.llv.li/kontakt/3408/amt-fur-umwelt>

<http://publikationen.dguv.de>

<http://dguv.de/ifa/stoffdatenbank>

<http://www.gischem.de>

<http://echa.europa.eu/en/candidate-list-table>

<http://www.ncbi.nlm.nih.gov/pubmed/>

### Methods according to Article 9 of Regulation (EC) No 1272/2008 have been used to assess the information for the purpose of classification

Physical hazards: Evaluation of test data

Health and environmental hazards: Calculation methods

### Wording of the hazard statements and/or precautionary statements referred to in section 2 to 15

|      |                                   |
|------|-----------------------------------|
| H315 | May cause skin irritation         |
| H317 | May cause allergic skin reactions |
| H319 | Causes severe eye irritation      |
| H335 | May cause respiratory irritation  |

### Training for employees

No special training is required for activities with the above-mentioned product because they are used by dental technicians.

### Further information

This product is part of a 2-component system.

This information is without guarantee or warranty. We do not accept any legal responsibility for it.

SDS Manufactured by: NOVODENT Ets., address and contact see point 1.3



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### Approach with exposure scenarios

Not applicable as no exposure scenarios need to be developed for mixtures.