



1 Identification of the mixture/substance and of the company

1.1 Product identifier

Trade name: **NOVOdon Liquid**

Article number: Article number starting with F01

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

Relevant identified uses: Mixture for the production of dental restorations

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Novodent Ets.
Industriestrasse 32
9487-Bendern
Principality of Liechtenstein

Tel: +423 377 15-00, Fax: +423 377 15-09, Email: msds@novodent.com

1.4 Emergenx telephone number

+423 377 1500 (Novodent Ets)

2 Hazards identification

2.1 Classification of the substance or mixture according to (EC) Nr. 1272/2008

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

2.2 Labelling according to regulation (EC) Nr.1272/2008

Pictograms and signal word



Signal word: Danger

Hazard-determining components of labelling:

Methylmethacrylat



Hazard statements

H317	May cause an allergic skin reaction.
H335	May cause irritation of respiratory tract
H315	Causes skin irritation
H225	Highly flammable liquid and vapor

Precautionary statements

P101	Keep out of reach of children
P280	Wear protective gloves / protective clothing / eye protection / face protection
P262	Not in the eyes, on skin, or on clothing.
P261	Do not breathe dust / fume / gas / mist vapor / spray.
P501	Dispose of contents / container in accordance with local regional rules
P210	Keep away from heat / sparks / open flames / hot surfaces. Do not smoke
P303	On contact with eyes:
P361	All spot, take off immediately all contaminated clothing.
P353	Rinse skin with water / shower

2.3 Other hazards

Particular danger of slipping on leaked/spilled product.



3 Composition / information on ingredients

3.1 Substances

This product is a mixture

3.2 Mixtures: Composition / information on ingredients

CAS Nr.: 80-62-6 EINECS: 201-297-1	Methylmethacrylat <u>Classification according to regulation (EC)Nr.1272/2008</u> All.irrit H317, respiratory.irrit H335, Skin.irrit H315, Flam. Liq. 2 H225	70-85%
CAS Nr.: 2082-81-7 EINECS: 218-218-1	Butandioldimethacrylat <u>Classification according to regulation (EC) Nr.1272/2008</u> Skin.irrit H315, Eye.irrit H319, All.irrit H335 Stot.se 3	15-25%

4 Erste-Hilfe-Massnahmen

4.1 Beschreibung der Erste-Hilfe-Massnahmen

Allgemeine Hinweise

Bei Auftretung von Gesundheitsstörungen Arzt hinzuziehen.

After inhalation

Supply fresh air and to be sure call for a doctor.

After skin contact

Rinse with wather. If skin irritation continues, consult a doctor.

After eye kontakt

Rinse open eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing

Rinse out mouth and then drink plenty of water. If symptoms persist consult a doctor.



4.2 Important acute and delayed symptoms and effects

Nothing is known.

4.3 Indication of any immediate medical attention and special treatment

No further relevant information available

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

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

For safety reasons unsuitable extinguishing agents

Water with pre-jet

5.2 Special hazards arising from the substance or mixture

No

5.3 Advice for firefighters

Cool endangered containers with water

6 Massnahme bei unbeabsichtigter Freisetzung

6.1 Personenbezogene Vorsichtsmassnahmen, Schutzausrüstung und Notfallverfahren

Use protective equipment as per section 8. Keep away unprotected persons

6.2 Environmental protection

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (sand, diatomite, acid binders, universal binders, sawdust) and provide adequate Ventilation



6.4 Reference to other sections

See section 7,8 for information on personal protection equipment and safe handling.

7 Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Only adequately trained personal should handle this product. For use in dentistry only

Information about fire and explosion protection

Keep ignition sources away - Do not smoke and take measures against electrostatic charging

7.2 Condition for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

No special measures required.

Advice on storage compatibility

Store only in original receptacle.

Further information on storage conditions

Protect from heat and direct sunlight.

Storage class VbF

Not applicable

7.3 Specific end use(s)

For more information, please refer to our instructions for use.



8 Limitation and supervision of exposure / personal protective equipment

8.1 Control parameters

Components with workplace control parameters to	
Methyl methacrylate CAS 80-62-6	
PEL	410 mg/m ³ , 100 ppm
REL	410 mg/m ³ , 100 ppm
TLV	Short-term value: 410 mg/m ³ , 100 ppm Long-term value: 205 mg/m ³ , 50 ppm

8.2 Exposure controls and personal protection

Additional information about design of technical plant

No further data, show section 7

Additional note

The list valid during the making serve as a basis.

Personal protective equipment

General protection and hygiene measures

Usual hygienic measures for dental practice. Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work. Avoid contact with the skin and eyes

Respiratory protection

Required when vapors / aerosols. Recommended Filter type: Filter A.

The operator has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the manufacturer and documented accordingly.

Protection hands

Disposable gloves butyl rubber, layer thickness 0,7mm, permeation (min) >480

Disposable gloves nitrile rubber, layer thickness 0,4mm, permeation (min) >120

The exact break trough time has to be requested from the protective hemp shoe manufacturer and must be observed.

Eye protection

Use safety glasses with side-shields conforming EN 166:2001



9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form: liquid
Farbe: according to product specification
Geruch: characteristic

Value / Unit method

Change in condition	
Melting point / Melting range	-48°C (-54,4°F)
Boiling point / Boiling range	101°C (213,8°F)
Flash point:	10°C (50°F)
Ignition temperature:	430°C (806°F)
Self-igniting:	No data available
Explosion limits:	The product is not explosive However, the formation of explosive Vapor - air mixture
Density by 20°C:	0,943 g/cm ³
Solubility in / Miscibility with water	at 20°C (68°F) 1,6g/l
Solvent content: organic solvent:	No data available
Solids content:	0,000 %

9.2 Other information

No

10 Stability and reactivity

10.1 Reactivity

Fumes can combine with air to form an explosive mixture

10.2 Chemical stability

Stable under normal handling and storage conditions.

10.3 Possibility of hazardous reactions

Risk of ignition or formation of inflammable gases or vapors with: Strong oxidizing agents

Exothermic reaction with: amine polymerization, ammonia

Risk of explosion with: aldehydes

10.4 Zu vermeidende Bedingungen

Warming. As critical 15 Kelvin below the flash point is to be evaluated. Light Expostion.

10.5 Incompatible materials

Rubber, various plastics



10.6 Hazardous decomposition products

No

11 Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

Schleimhautirritationen in the mouth, throat, esophagus and gastrointestinal tract.

Irritation

Irritating to skin, eyes and mucous membranes

Corrosivity

No

Sensitization

Skin contact may sensitization.

Repeated dose toxicity

Not tested

Carcinogenicity

Not tested

Mutagenicity

Not tested

Reproductive toxicity

Not tested

More information

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: irritant

12 Ecological information

12.1 Toxicity

Aquatic toxicity: 1 (Listeneinstufung): low hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage systems.



12.2 Persistence and degradability

Biodegradability; Result: Readily biodegradable > 95%

12.3 Bioakkumulationspotenzial

Verteilungskoeffizient: n-Octanol/Wasser logPow: 1,38 (20°C). Methode OECD-Prüfrichtlinie 107
Bioakkumulation ist nicht zu erwarten.

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects

Do not flush into surface waters, wastewater or soil.

13 Disposal considerations

13.1 Waste treatment methods

Recommendation

Take to an approved landfill or waste incineration plant, under conditions approved by the local authority.

Waste key

20 01 39 Acrylics

Packaging

Contaminated packaging

Disposal according to official regulations

Open rinsed packaging

Disposed in household waste



14 Angaben zum Transport

14.1 UN-Number

1247

14.2 Properly UN shipping name

ADR-RID Landtransport

UN1247 Methylmethacrylat, monomer, stabilisiert

IMDG-Code Seeschiffstransport

UN1247 METHYLMETHACRYLAT MONOMER, STABILIZED

ICAO-TI / IATA-DGR Lufttransport

UN1247 METHYLMETHACRYLAT MONOMER, STABILIZED

14.3 Transport hazard class

ADR-RID



Class: Flammable liquids
Lable: 3

IMDG



Class: Flammable liquids
Lable: 3

IATA



Class: Flammable liquids
Lable: 3

14.4 Packaging group

III (Substances presenting middl danger)



14.5 Environmental hazards

Water hazard class WGK 1 (Self-assessment: slightly hazardous for water)

14.6 Special precautions for user

Show section 6-8

14.7 Transport in bulk

Not applicable

14.8 Transport / Additional information

Mail not or only to a limited extent. Note post special provisions.

ADR:

Excepted quantities:	E2
Limited quantities (LQ):	1L
Transport category:	2
Tunnel restriction code:	E
UN „Model Regulation“	UN 1247, Methylmethacrylat, monomer, stabilisiert, 3 II

15 Rechtsvorschriften

15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften

Kennzeichnung nach EWG-Richtlinien

Kennzeichnung nach EG-Richtlinie 93/42EWG für Medizinprodukte:

Das Produkt ist nach EG-Richtlinien/GefStoffV eingestuft und gekennzeichnet.

Die beim Umgang mit Chemikalien üblichen Vorsichtsmassnahmen sind zu beachten

National regulations

Employment restrictions VbF

Not applicable

Water hazard class

WGK 1 (Self-assessment): slightly hazardous for water



15.2 Material safety assessment

EU regulations

Störfallverordnung 96/82 / EC

Flammable. 6 Volume 1: 5,000 t, Volume 2: 50,000 t

16 Other information

Training records: teachings on hazards and protective measures to hand the operating instructions for liquid methyl methacrylate. The training must be provided before the start of employment and at least annually there after and documented.

Training instructions: instructions about hazards and protective measures used at hand, operating instructions for liquid methyl methacrylate. The workout shall be before the start of employment and thereafter at least Annually and Documented.

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

Safety data sheet creation of

NOVODENT ETS. Industriestrasse 32, 9487- Bendern, Principality of Liechtenstein