



1 Identification of the mixture/substance and of the company

1.1 Product identifier

Trade name: **NOVOpont, DUROpont OPAQUER**

Article number: Article number starting with F80 F59

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
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

Flam. Liq. 2 H 225, Eye.irrit H319, drows.dizz.H336, Flam. Liq. and vapor H226

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

Pictograms and signal word



Signal word: Danger

Hazard-determining components of labelling:

Butanon, Nitromethan, n-Butylacetat



Hazard statements

H225	Highly flammable liquid and vapor
H319	May cause irritation of respiratory tract
H336	Causes skin irritation
H226	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.
P210	Keep away from heat, hot surfaces, sparks, open flames and other. Do not smoke
P510	Dispose of contents / container in accordance with local regional rules
P305+	On contact with eyes:
P351+	Rinse cautiously with water for several minutes
P338	Remove contact lenses, if possible. Continue rinsing.
P403	Store in a well-ventilated place.
P233	Keep container tightly closed.

2.3 Other hazards

No further relevant information available



3 Composition / information on ingredients

3.1 Substances

This product is a mixture

3.2 Mixtures: Composition / information on ingredients

CAS Nr: 78-93-3	Butanon <u>Classification according to Regulation (EC) No 1272/2008</u> Flam. Liq. 2 H 225, Eye.irrit H319, drows.dizz.H336	50-70%
CAS Nr.: 75-52-5	Nitromethan <u>Classification according to Regulation (EC) No 1272/Flam.</u> Liq. and vapor H226, drows.dizz.H336	5 – 25%
CAS Nr.: 123-86-4	n-Butylacetat <u>Classification according to Regulation (EC) No 1272/Flam.</u> Liq. and vapor H226, drows.dizz.H336	5- 15%

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 contact

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 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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 sage handling

Advice on sage 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 an vessels

No special measures required.

Advice on storage compatibilitiy

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	
Butanon CAS 78-93-3	
AGW	Langzeitwert: 600 mg/m ³ , 200 ml/m ³
DNEL	Oral Long-term - systemic effects, general population 31 mg/kg (-) Dermal Acute - local effects, general population 412mg/kg (-) Long-term - systemic effects, worker 1161 mg/kg (-) Inhalativ Long-term - systemic effects, general population 106 mg/m ³ (-) Long-term - systemic effects, worker 600 mg/m ³ (-)
PNEC	Aquatic compartment - freshwater 55,8 mg/L (-) Aquatic compartment - marine water 55,8 mg/L (-) Aquatic compartment - water, intermittent releases 55,8 mg/L (-)
Nitromethan CAS 75-52-5	
MAK	Switzerland: 100 ml·m ⁻³ bzw. 250 mg·m ⁻³ 940 mg·kg ⁻¹ (LD50, Rat, oral)
n-Butylacetat CAS 123-86-4	
MAK	DFG/Switzerland: 100 ml·m ⁻³ bzw. 480 mg·m ⁻³

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

-86°C

Boiling point / Boiling range

80°C

Flash point:

-6°C

Ignition temperature:

no data available

Self-igniting:

No data available

Explosion limits:

Low limit: 1.8 Vol.%

Upper limit: 11.5 Vol.%

Density by 20°C:

101 mbar

Solubility in / Miscibility with water

270 g/l (20°C)

Solvent content: organic solvent:

No data available

dynamic viscosity:

0.40 mPas (20°C)

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

No further data

10.4 Conditions to avoid

Heating.



10.5 Incompatible materials

Oxidant, chloroform / alkali metal hydroxides.

10.6 Hazardous decomposition products

No

11 Toxicological information

11.1 Information on toxicological effects

LC50 (inhalation, rat): 20 mg / l / 4 h.

LD50 (dermal, rabbit): > 8000 mg / kg.

LD50 (oral, rat): > 2600 mg / kg.

Irritation

Specific symptoms in animal studies:

Eye irritation test (rabbit): Severe irritation.

Skin irritation test (rabbit): Slight irritation

Corrosivity

No

Sensitization

Sensitization test (guinea pig): No sensitizing effect.

Repeated dose toxicity

Not tested

Carcinogenicity

Not tested

Mutagenicity

Ames-Test: negativ

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 to reach ground water, water course or sewage systems.

12.2 Persistence and degradability

Readily biodegradable

12.3 Bioaccumulative

Due to the distribution coefficient n-octanol / water an accumulation in organisms is not to expect.

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

No further relevant information available.

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

1193

14.2 Properly UN shipping name

ADR-RID Land transport

UN 1193 ETHYLMETHYLKETON (METHYLETHYLKETON)

IMDG-Code Maritime

UN 1193 ETHYL METHYL KETONE (METHYL ETHYL KETONE)

ICAO-TI / IATA-DGR Air transport

UN 1193 ETHYL METHYL KETONE (METHYL ETHYL KETONE)

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

II (Substances presenting middle 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.

15 Legislation

15.1 Safety, health and environmental regulations / legislation specific

Labelling according to EU guidelines

Labelling according to EC Directive 93 / 42EWG for medical devices:

The product is classified and labeled in accordance with EC Directives / Ordinance on Hazardous Materials.

Handle in accordance with good industrial hygiene and safety practice

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

incident Ordinance 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 Butanon. 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 butanon. 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