



1 Identification of the mixture/substance and of the company

1.1 Product identifier

Trade name: **Novoplast Flash**

Article number: Article number starting with F13F

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.
Wirtschaftspark 34
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., 9492 Eschen, Fürstentum Liechtenstein)

2 Hazards identification

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

All.irrit H317, Skin.irrit H315, Eye dam. H318, Harmf. If swallow. H302, Aq.tox. H411

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

Pictograms and signal word



Signal word: Danger

Hazard-determining components of labelling:

2,2-bis(hydroxymethyl)-1,3-Propanediol



Hazard statements

H317	May cause an allergic skin reaction.
H315	Causes skin irritation.
H318	Causes serious eye damage
H302	Harmful if swallowed
H411	Toxic to aquatic life with long lasting effects

Precautionary statements

P101	Keep out of reach of children
P280	Wear protective gloves / protective clothing / eye protection / face protection
P270	Do not eat, drink or smoke when using this product.
P261	Do not breathe dust / fume / gas / mist vapor / spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P301	+312 If SWALLOWED: Call a poison center or doctor/physician if you feel unwell.
P330	Rinse mouth.
P302	+P352 If on SKIN: Wash with plenty of soap and water.
P305	+P351 +P338 If in EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a poison center or doctor/physician.
P391	Collect spillage.
P501	Dispose of contents/container in accordance with local and national regulations.

2.3 Other hazards

Polymerisation may occur from excessive heat, contamination or exposure to direct sunlight.



3 Composition / information on ingredients

3.1 Substances

This product is a mixture

3.2 Mixtures: Composition / information on ingredients

CAS Nr.: 3524-68-3	2,2-bis(hydroxymethyl)-1,3-Propanediol <u>Classification according to regulation (EC)Nr.1272/2008</u> All.irrit H317, Skin.irrit H315, Eye dam. H318, Harmf. If swallow. H302, Aq.tox. H411	60-80%
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4 First Aid

Description of first aid measures

General information

In case of occurrence of health disorders doctor.

After inhalation

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

After skin contact

Rinse with water. 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.

4.1 Important acute and delayed symptoms and effects

Nothing is known.

4.2 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

Keep containers cool by spraying with water if exposed to fire.

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 safe handling

Advice on safe handling

Only adequately trained personnel 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	
2,2-bis(hydroxymethyl)-1,3-Propanediol CAS 3524-68-3	
INDUSTRIAL	Dermal: Dnel 1.04 mg/kg/day Long term, systemic Inhalation: Dnel 7.35 mg/m ³ Long term, systemic

8.2 Exposure controls and personal protection

Additional information about design of technical plant

No further data, see section 7

Additional note

The list is valid during the manufacturing process 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/paste

Farbe: according to product specification

Geruch: acrylate

Value / Unit method

Change in condition

Melting point / Melting range

-48°C (-54,4°F)

Boiling point / Boiling range

> 100°C (212°F)

Flash point:

> 100°C (212°F)

Ignition temperature:

> 100°C (212°F)

Self-igniting:

No data available

Explosion limits:

No data available

Density by 20°C:

No data available

Solubility in / Miscibility with water

No data available

Solvent content: organic solvent:

No data available

Solids content:

No data available

9.2 Other information

No

10 Stability and reactivity

10.1 Reactivity

No data available



10.2 Chemical stability

Stable under normal handling and storage conditions.

10.3 Possibility of hazardous reactions

Uncontrolled polymerization may cause excessive heat and pressure increase, which can cause closed containers or container to burst. In direct sunlight can take place gefährliche polymerization. When heated State may find hazardous polymerization with significant heat.

10.4 Conditions to avoid.

See 10.3.

10.5 Incompatible materials

Avoid contact with peroxides, avoid initiators that produce free radicals, avoid exposure to reactive metals
Contact with alkalis. They produce an exothermic reaction with the product, Unintentional contact with these should be avoided

10.6 Hazardous decomposition products

Oxides of carbon, hydrocarbon

11 Toxicological information

11.1 Information on toxicological effects

Likely routes of exposure

Skin Eyes Oral

Acute toxicity – oral

Acute toxicity – dermal

Acute toxicity - inhalation

Skin

Irritation

Eye

Causes severe damage to eyes

Respiratory

No data available



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

Algae test results

Test: Growth Inhibition (OECD 201)

Duration: 24-96 hr

Species: Pseudokirchneriella subcapitata

33 mg/l	LrL50	As water accommodating fraction
12 mg/l	LrC50	As water accommodating fraction

Fish test results

Test: Acute toxicity, freshwater (OECD 203)

Duration: 96 hr

Species: Carp (Cyprinus carpio)

3.2 mg/l	LC50	As water accommodating fraction
2.2 mg/l	NOEC	As water accommodating fraction

Invertebrate test results

Test: Acute immobilization (OECD 202)

Duration: 48 hr

Species: Water flea (Daphnia magna)



13 mg/l	EC50	As water accommodating fraction
10.3 mg/l	NOEC	As water accommodating fraction

Degradation

Test: CO2 evolution: Modified sturm (OECD 301B)
Duration: 20 days

12.2 Persistence and degradability

6 – 14% This material is not readily biodegradable.

12.3 Growth inhibition.

No further relevant information available

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

This product does not meet the criteria for PBT and vPvB.

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

No

Packaging

Contaminated packaging

Disposal according to official regulations

Open rinsed packaging

Disposed in household waste



14 Transport information

14.1 UN-Number

3082

14.2 Properly UN shipping name

ADR-RID landtransport

Hazard class: 9

IMDG-Code Maritime

Hazard class: 9

ICAO-TI / IATA-DGR Air

Hazard class: 9 **Forbidden**

14.3 Transport hazard class

ADR-RID

No

IMDG

No

IATA

No

14.4 Packaging group

III (Substances presenting middl danger)

14.5 Environmental hazards

Water hazard class WGK 2 (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):

Transport category:

Tunnel restriction code: E

UN „Model Regulation“ UN 3082

15 Legislation

15.1 Safety, health and environmental regulations / legislation specific

Labelling according to EU guidelines

Labelling according to EC Directive 93/42 EEC 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 2 (Self-assessment): slightly hazardous for water

15.2 Material safety assessment

EU regulations



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.

Safety data sheet creation of

NOVODENT ETS. Wirtschaftspark 34, 9492 Eschen, Principality of Liechtenstein