

THINNER-Verdüner

11294-0004

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

1.1. Product identifier

THINNER-Verdüner

Article number: 510-0001/510-0006/510-0001M

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

Use of the substance/mixture

Thinners and varnishes

1.3. Details of the supplier of the safety data sheet

Company name: YETI Dentalprodukte GmbH

Street: Industriestrasse 3

Place: D-78234 Engen

Telephone: +49 7733-9410-0

Telefax: +49 7733-9410-22

Responsible Department: sdb@yeti-dental.com

Responsible for the safety data sheet: sds@gbk-ingelheim.de

1.4. Emergency telephone

+49 7733-9410-0 (Mo-Do 8:00 - 16:30, Fr 8:00 - 15:00)

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 2

Aspiration hazard: Asp. Tox. 1

Specific target organ toxicity - single exposure: STOT SE 3

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Highly flammable liquid and vapour.

May be fatal if swallowed and enters airways.

May cause respiratory irritation.

May cause drowsiness or dizziness.

Toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Hydrocarbons, C9, aromatics

n-butyl acetate

Signal word:

Danger

Pictograms:



Hazard statements

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

THINNER-Verdüner

11294-0004

P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P391	Collect spillage.
P235	Keep cool.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional advice on labelling

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

2.3. Other hazards

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
64742-95-6	Hydrocarbons, C9, aromatics			90 - 95 %
	918-668-5		01-2119455851-35	
	Flam. Liq. 3, STOT SE 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H335 H336 H304 H411			
123-86-4	n-butyl acetate			5 - 10 %
	204-658-1	607-025-00-1	01-2119485493-29	
	Flam. Liq. 3, STOT SE 3; H226 H336 EUH066			

Full text of H and EUH statements: see section 16.

Further Information

The used hydrocarbons contain no benzene or benzene in concentrations < 0,1 % w/w and fulfill the conditions of Note P to the annex VI of the regulation (EC) No 1272/2008.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove contaminated soaked clothing immediately. Keep warm and calm injured person. Take away from danger area and lay down affected person.

After inhalation

Move to fresh air in case of accidental inhalation of vapours or decomposition products. Refer for medical treatment.

After contact with skin

Wash off with soap and plenty of water. Consult a doctor if skin irritation persists.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical treatment by eye specialist.

After ingestion

Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Never give anything by mouth to an unconscious person. Summon a doctor immediately. Do not give neutralising liquids.

THINNER-Verdüner

11294-0004

4.2. Most important symptoms and effects, both acute and delayed

Following inhalation/eye contact: irritation of the mucous membranes, a numbing effect, impaired reaction times and sense of coordination are possible at high concentrations. Headache, dizziness, nausea, etc. may arise following prolonged inhalation of high vapour concentrations.

4.3. Indication of any immediate medical attention and special treatment needed

In case of the person being unconscious summon a doctor immediately.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), water-spray.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Fire may produce: Carbon monoxide and carbon dioxide. Vapours are heavier than air and spread along ground. Flashback at a long distance is possible.

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.

Protective suit.

Additional information

Vapours are heavier than air and spread along ground. The vapour/air mixture is explosive, even in empty, uncleaned receptacles. Risk of bursting of the receptacle. Cool containers at risk with water spray jet. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of vapour formation use respirator. Ensure adequate ventilation. Use personal protective clothing. Get unprotected persons to safety. Keep away from heat and sources of ignition. Avoid contact with the skin and the eyes. Do not inhale vapour/aerosol.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water. Risk of explosion.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Shovel into suitable container for disposal. Clean contaminated surface thoroughly. Take measures against electrostatic charging.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).

Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Do not keep containers unlocked. Handle in accordance with the general hygienic rules. When using do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Contaminated work clothing should not be allowed out of the workplace. Avoid formation of Aerosols.

Advice on protection against fire and explosion

Vapours are heavier than air. In use, may form flammable/explosive vapour-air mixture. Take precautionary measures against static discharges (earthing (grounding) at pouring).

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Provide solvent-resistant and impermeable floor. Provide floor with bunding. Prevent penetration into the ground.

Store in the original container.

Advice on storage compatibility

Keep away from food, drink and animal feeding stuffs. Do not store together with oxidizing and self-igniting products. Do not store with: Medicinal product, Substances which form flammable gases with water, Organic peroxides.

Further information on storage conditions

Use only in well-ventilated areas. Keep containers tightly closed in a cool, well-ventilated place. Protect from heat and direct solar radiation.

7.3. Specific end use(s)

THINNER-Verdüner

11294-0004

Applications in the dental field for sealing and as a placeholder

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
123-86-4	Butyl acetate	150	724		TWA (8 h)	WEL
		200	966		STEL (15 min)	WEL

8.2. Exposure controls



Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over the use of personal protective equipment. Ensure adequate ventilation. Provide sufficient air exchange and/or exhaust in work rooms. Orientating ethanol concentration measurement with detector tubes; e.g. Compur (549 210 type: 104 SA), Dräger (81 01631 type: alcohol/25a), Auer (5085-818 type: ethanol-100).

Protective and hygiene measures

Do not inhale vapours. Avoid contact with eyes and skin. Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. Take off immediately all contaminated clothing.

Eye/face protection

Tightly fitting goggles (EN 166).

Eye wash bottle with pure water (EN 15154).

Hand protection

Splash protection: Protective gloves resistant to chemicals made off butyl, minimum coat thickness 0,7 mm, permeation resistance (wear duration) > 240 minutes, i.e. protective glove <Butoject 898> made by www.kcl.de.

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions. Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

Long sleeved clothing (EN 368). Wear fire retardant protective coveralls. Take precautions against electrostatic discharges.

Respiratory protection

In case of vapour / mist formation use respirator. (Full mask, filter A).

Environmental exposure controls

Do not empty into drains Explosion risk.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless
Odour:	Solvent-like
pH-Value:	n.d.

Changes in the physical state

Melting point:	- 95 °C	
Initial boiling point and boiling range:	(697 hPa) 56 °C	
Sublimation point:	n.d.	
Softening point:	n.d.	
Pour point:	n.d.	
Flash point:	- 18 °C	ISO 1523
Sustaining combustion:	No data available	
Flammability		

THINNER-Verdüner

11294-0004

Solid:	n.d.	
Gas:	n.d.	
Explosive properties	The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated. Heating will cause pressure rise with risk of bursting.	
Lower explosion limits:	1,0 vol. %	
Upper explosion limits:	12,0 vol. %	
Ignition temperature:	265 °C	DIN 51794
Auto-ignition temperature		
Solid:	n.d.	
Gas:	n.d.	
Decomposition temperature:	n.d.	
Oxidizing properties	n.d.	
Vapour pressure: (at 20 °C)	230 hPa	
Vapour pressure:	n.d.	
Density (at 20 °C):	0,860 g/cm ³	ISO 2811-1
Bulk density:	n.d.	
Water solubility:	Miscible	
Solubility in other solvents	n.d.	
Partition coefficient:	n.d.	
Viscosity / dynamic: (at 20 °C)	n.d.	
Viscosity / kinematic:	n.d.	
Flow time:	n.d.	
Vapour density:	n.d.	
Evaporation rate:	n.d.	
Solvent separation test:	n.d.	
Solvent content:	100 %	

9.2. Other information

Solid content: n.d.

Other information

No data available.

(n.a. = not applicable; n.d. = not determined)

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed. Heating will cause pressure rise with risk of bursting.

In use, may form flammable/explosive vapour-air mixture. Uncleaned empty vessels may contain product gases which can form explosive mixtures with air.

10.2. Chemical stability

Chemically stable.

10.3. Possibility of hazardous reactions

Heating can release vapours which can be ignited.

10.4. Conditions to avoid

Vapour/air mixtures are explosive at intensive warming. Heating can release vapours which can be ignited. Avoid temperatures above 9 °C. In use formation of flammable/explosive vapour-air mixtures possible.

Keep from freezing. Protect against direct sun radiation.

10.5. Incompatible materials

Oxidizing agents (strong), Strong acids and strong bases.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

THINNER-Verdüner

11294-0004

CAS No	Chemical name				
	Exposure route	Method	Dose	Species	Source
123-86-4	n-butyl acetate				
	oral	LD50	10800 mg/kg	Rat	
	dermal	LD50 mg/kg	> 17600	Rabbit	

Irritation and corrosivity

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

Sensitising effects

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

STOT-single exposure

May cause respiratory irritation. (Hydrocarbons, C9, aromatics)

May cause drowsiness or dizziness. (Hydrocarbons, C9, aromatics), (n-butyl acetate)

Severe effects after repeated or prolonged exposure

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

Aspiration hazard

May be fatal if swallowed and enters airways.

Further information

Inhalation of vapours in high concentration can cause narcotic effects. Inhalation causes headache/nausea.

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hydrocarbons, C9, aromatics

LC50 (96h): 1 - 10 mg/l (Brachydanio rerio)

EC50 (48h): 1 - 10 mg/l (Daphnia magna)

EC50 (72h): 1 - 10 mg/l (Scenedesmus subspicatus)

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
123-86-4	n-butyl acetate					
	Acute fish toxicity	LC50	18 - 185 mg/l	96 h		REACH / GESTIS

12.2. Persistence and degradability

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

12.3. Bioaccumulative potential

Not determined

12.4. Mobility in soil

Not determined

12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

12.6. Other adverse effects

The product has not been tested. Because of the product's consistency and lack of solubility in water bioavailability is not likely.

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

This material and its container must be disposed of as hazardous waste. If recycling is not practicable, dispose of in compliance with local regulations. The waste code number must be agreed with the disposer / manufacturer.

THINNER-Verdüner

11294-0004

Waste disposal number of waste from residues/unused products

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances
Classified as hazardous waste.

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.
Contaminated packagings are to be treated like the product itself.
Recommended cleaning agent: water with detergents.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1263
14.2. UN proper shipping name: Paint related material
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Classification code: F1
 Special Provisions: 163 367 640D 650
 Limited quantity: 5 L
 Excepted quantity: E2
 Transport category: 2
 Hazard No: 33
 Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number: UN 1263
14.2. UN proper shipping name: Paint related material
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Classification code: F1
 Special Provisions: 163 367 640D 650
 Limited quantity: 5 L
 Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 1263
14.2. UN proper shipping name: Paint related material
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Special Provisions: 163, 367
 Limited quantity: 5 L
 Excepted quantity: E2

THINNER-Verdüner

11294-0004

EmS: F-E, S-E

Air transport (ICAO)

14.1. UN number: UN 1263
14.2. UN proper shipping name: Paint related material
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3



Special Provisions: A3 A72 A192
Limited quantity Passenger: 1 L
Passenger LQ: Y341
Excepted quantity: E2
IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes



14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

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

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information

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

EU regulatory information

2004/42/EC (VOC): 100 %

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D): 2 - water contaminating

Additional information

The product is not subject to the EU Directive 2004/42/EC concerning the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

Section: 2, 12.

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

THINNER-Verdüner

11294-0004

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)