SAFETY DATA SHEETS

This SDS packet was issued with item: 075349931

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

073430048 073430055 073430063 073430097 075342688

Spacer

1. Identification of the Substance/Preparation and of the Company

Article description:	Die Spacers / varnishes (see Appendix)
Use:	Sealing of dies and placeholder for fixing cement
Producer:	YETI DENTALPRODUKTE GMBH Industriestr. 3 78234 Engen Germany
Information:	Tel.: +49 - 7733 / 9410-0 Fax.: +49 - 7733 / 9410-22 (Mo-Thu 8:00 – 16:30; Fr 8:00 – 15:00)
Emergency:	Tel.: +49 - 7733 / 9410-0 Fax.: +49 - 7733 / 9410-22 (Mo-Thu 8:00 – 16:30; Fr 8:00 – 15:00)

2. Hazards Identifications

	F	Highly flammable
No Related	Xi	Irritant
R 67 <u>Syster</u> The cl	Irritatii Vapou <u>m of cla</u> lassifica	/ flammable ng to eyes urs may cause drowsiness and dizziness. <u>assification:</u> ation complies with the actual EC-lists, but is completed by indications from rature and by indications of the company.
Nitroc		<u>ations:</u> e can be inflamed by flames, heat, agitation, shock, spark, static charge. Dry e has explosive characteristics.

3. Composition / Information on Ingredients

Hazardous components / Chemical characteristics:						
Description:	CAS-No.	EINECS-No.	<u>Code</u>	<u>R-Phrase</u>	<u>Emph. %</u>	
Ethyl acetate	141-78-6	205-500-4	F	11-36-66- 67	20-50	
n-Butyl acetate Nitrocellulose with max. 12,6 % Nitrogen	123-86-4 9004-70-0	204-658-1	👛 F	10-66-67 11	10-20 20-50	
Isopropyl	67-63-0		F	11-36-67	20-35	
Full description of the mer	itioned R-Phra	ises can be four				

4. First-Aid Measures

General indications:

In any case of severe injury, severe diseases and trouble of consciousness don't transport the affected person, but call a doctor. Find out accident details and nature of influence including quantity and duration of influence. Never instill anything through the mouth of an unconscious person. Immediately remove clothes that came in contact with the product. Bring casualty / inju out of the danger zone.

Inhalation:

Provide fresh air, if necessary mouth to mouth resuscitation, warmth. If troubles continue, call a doctor. In case of unconsciousness bedding and transport in recovery position.

Skin contact:

Rinse off with water and soap. If irritation of skin continues, call on a doctor.

Eye contact:

Rinse the opened eye with plenty of water and consult ophthalmologist.

Ingestion:

Rinse off mouth with water and drink a lot. Don't try to puke it up and get immediately in contact with a doctor. Never instill anything through the mouth of an unconscious person.

5. Fire-Fighting Measures

Suitable extinguishing media:

Foam, CO2 (carbon dioxide), fire extinguishing powder, fogging water. Fight bigger fires with fogging water or alcohol resistant foam.

Special danger caused by the products, its combustion products or emerging gases:

If heated or in case of fire can be released: vapours

The vapours of the product are heavier than air and diffuse on the ground. Combustion over bigger distances possible.

Special protection equipment:

Wear respiratory protection.

Further indications:

Container in danger has to be cooled with fogging water.

6. Accidental Release Measures

Personal precautions:

Use personal protective equipment, keep person without protection away. Remove sources of heat and ignition. Ventilate area of leak or spill. Eliminate containers with leaks. Avoid contact with skin and eyes.

Protection equipment:

Gloves of PVC. Get confirmation of the producer of protective equipment that the chosen protection is sufficient.

Environmental precautions:

Don't empty into drains, sewerage, canalization, soil and waters. Thin with much water. Methods for cleaning up:

Absorb with liquid soaking material (sand, diatomite, universal adsorbent).

Ensure good ventilation. Dispose of the absorbed product in marked and closable containers and according to local current regulations.

7. Handling and Storage

Handling:

Indications for a safe handling:

The normal protection measures for chemicals have to be respected.

Indications against fire and explosions:

Keep away from fire. Don't smoke. Take measures against static charge.

Storage :

Ensure a good ventilation. Store dry and cool.

Respect storage conditions according to VbF.

Indications for clustering:

Don't store close to open fire, sparks or strong oxidants. Don't store together with oxidizing or self-igniting materials, or with highly flammable solids.

Further indications for storage conditions:

Keep container firmly closed. Store cool and dry in well-closed package. <u>Storage class:</u>

Classification according to Ordinance on Industrial Safety and Health (BetrSichV): highly flammable.

8. Exposure Controls / Personal Protection Equipment

	neasures (prevention ts of ingredients	of worker expo	<u>sure):</u>		
CAS-No.	Description	<u>Value</u>	<u>Unit</u>		
141-78-6 67-63-0	Ethyl acetate Isopropyl	MAK MAK	1500 mg/m ³ 500 mg/m ³	400 ml/m ³ 200 ml/m ³	Y; DFG Y; DFG

Personal protection equipment :

General precautions for safety and hygiene:

Immediately take off contaminated and soaked clothes. Avoid inhalation of gases, vapours and aerosols. Avoid contact with skin or eyes. Do not smoke, eat or drink during work. Get confirmation of the producer of protective equipment that the chosen protection is sufficient.

Respiratory protection:

Wear respiratory protection when ventilation is not sufficient.

Hand protection:

Wear suitable protective gloves. The material of the gloves has to be impenetrable and resistant against the product. Respect the indications of the producer as to the permeability and breakthrough- time, as well as the special conditions at the working place (mechanical load, time of contact).

Material of gloves:

Gloves of PVC. The choice of a suitable glove depends not only on the material, but as well on other quality features, different from producer to producer. Since the product is a preparation of several materials, the resistance of the glove material is not predictable und therefore has to be verified before application.

Permeation time:

The exact time of permeation has to be requested from the producer of the protection gloves and has to be respected.

Eye protection: Wear sealed safety goggles.

<u>Body protection:</u> Wear protective working clothes.

9. Physical and Chemical Properties

Appearance: Colour: Odour:	liquid diverse, depending on colouring characteristic
Safety relevant data:	55°C
Boiling point / range: Ignition temperature:	315°C (DIN 51794)
•	-18°C
Flash point:	
Danger of explosion:	Product can generate explosive vapour-gas mixture, risk of bursting in case of overheating.
Explosion limit:	lower 1,5 Vol. %; upper 13,0 Vol. %
Vapour pressure at 20°C:	247 hPa
Density :	not defined
Solubility in water:	partly mixable
Kinematic viscosity at 20°C:	20s (DIN 53211/4)
pH:	not applicable
•	

10. Stability and Reactivity:

<u>Thermal decomposition / conditions to avoid:</u> No decomposition if used in accordance to instructions, intense heating. <u>Substances to avoid:</u> None, if used in accordance to instructions. <u>Dangerous reactions:</u> Development of highly flammable gases and vapours. <u>Dangerous decomposition products:</u> No dangerous decomposition products known.

11. Toxicological Information:

Acute toxicity:
LD ₅₀ oral 5045 mg / kg (rat) Isopropyl
LD ₅₀ oral 5620 mg / kg (rat) Ethyl acetate
Primary irritation:
On skin:
Degreasing effect, can lead to dermatitis.
<u>At eyes:</u>
Irritating
Sensitization:
Not known.
Further toxicological information:
Inhalation of concentrated vapours can lead to conditions similar to narcosis and headache,
dizziness etc.

Publisher: YETI Dentalprodukte GmbH EG-SDB Seite 14 / DIN EN ISO 9001

12. Ecological Information:

General indications:

Water hazard class 1 (self-rating): slightly hazardous to water Don't pour into ground water, water bodies or sewerage system undiluted or in bigger quantities.

13. Disposal Considerations:

Recommendation:

Mustn't be disposed of together with domestic waste. Don't pour into canalization. The choice the disposal procedure depends on the composition of the product at the time of disposal and the local disposal possibilities.

Waste code number:

For this product no waste code number according to European Waste Catalogue (EWC) can defined, since only the intended use by the consumer enables the classification. This Waste on number has to be defined in agreement with the disposal facility / producer / authority.

European Waste Catalogue:

08 01 11 paint and varnish waste, that contain organical solvents or other dangerous substan Uncleaned package:

Disposal according to official directives.

Recommendation detergent:

Water, if necessary add detergent.

14. Transport Information:

ADR/RID-GGVS/E class:	and GGVS/GGVE (international / domestic) 3	
Classification code:	F1	
Packing group:	II	
UN-No.:	1263	
Proper shipping name:	Paint	
Tunnel restriction code:	(D/E)	
Transport by sea IMDG/GG	/Sea	
IMDG/GGVSea-Class:	3	
Packing group:	II	
UN-No.:	1263	
EMS-No.:	F-E, S-E	
Proper Shipping Name:	Paint	
Properties:	Flashpoint -18°C	

Publisher: YETI Dentalprodukte GmbH EG-SDB Seite 15 / DIN EN ISO 9001

EG – Safety Data Sheet

YETI Dentalprodukte GmbH According to 1907/2006/EG, article 31

Transport by air ICAO-TI and IATA-DGR

ICAO/IATA-class:	3
Packing group:	II
UN/ID-No.:	1263
Proper Shipping Name:	Paint
Packing Inst.:	305
Max. Quantity f. passenger aircraft:	5L

15. Regulatory Information:

<u>Specifications according to European Community guidelines:</u> The product is classified and marked according to European community guidelines and Ordinance on Hazardous Substances (GefStoffV).

Code letter and hazard information:



irritant



highly flammable

R-Phrases:

- R 11 highly flammable
- R 36 Irritates the eyes
- R 66 Repeated contact can lead to rough and cracked skin
- R 67 Vapours can cause drowsiness and dizziness

S-Phrases:

- S 2 Keep out of the reach of children.
- S 7 Keep container tightly closed.
- S 16 Keep away from fire don't smoke.
- S 24/35 Avoid contact with skin or eyes.
- S 26 In case of contact with the eyes, rinse immediately with water and consult a do

National regulations:

Classification according to Ordinance on Industrial Safety and Health (BetrSichV): highly flammable.

Water hazard class:

Water hazard class 1 (self-rating): slightly hazardous to water (self-rating according to VwVws 17.05.1999, appendix 3).

16. Other Information:

Wording of R-Phrases in Part 2:

- R 10 flammable
- R 11 highly flammable
- R 36 Irritates the eyes
- R 66 Repeated contact can lead to rough and cracked skin
- R 67 Vapours can cause drowsiness and dizziness

The statements of this Safety Data Sheet correlate to our actual state of knowledge and comply with national and european regulations. The indicated working conditions of the user are not subject to our control and knowledge. The product mustn't be used for any other purpose than indicated in Part 1 without written permission. The user is responsible for respecting all necessary legal regulations.

The safety data sheet serves as description of products in regard to necessary safety measures. The indications do not have the meaning of garanties on properties und do not establish a contractual legal relationship.

Appendix article group:500-0001

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Spacer

1. Identification of the Substance/Preparation and of the Company

Article description:	Die Spacers / varnishes (see Appendix)
Use:	Sealing of dies and placeholder for fixing cement
Producer:	YETI DENTALPRODUKTE GMBH Industriestr. 3 78234 Engen Germany
Information:	Tel.: +49 - 7733 / 9410-0 Fax.: +49 - 7733 / 9410-22 (Mo-Thu 8:00 – 16:30; Fr 8:00 – 15:00)
Emergency:	Tel.: +49 - 7733 / 9410-0 Fax.: +49 - 7733 / 9410-22 (Mo-Thu 8:00 – 16:30; Fr 8:00 – 15:00)

2. Hazards Identifications

Lectransition	F	Highly flammable		
Xi Related	Xi	Irritant		
R 67 <u>Syste</u> The c	Irritati Vapo <u>m of cl</u> lassific	y flammable ing to eyes urs may cause drowsiness and dizziness. <u>assification:</u> ation complies with the actual EC-lists, but is completed by indications from rature and by indications of the company.		
<u>Further indications:</u> Nitrocellulose can be inflamed by flames, heat, agitation, shock, spark, static charge. Dry Nitrocellulose has explosive characteristics.				

3. Composition / Information on Ingredients

Hazardous components / Chemical characteristics:					
Description:	<u>CAS-No.</u>	EINECS-No.	<u>Code</u>	<u>R-Phrase</u>	<u>Emph. %</u>
Ethyl acetate	141-78-6	205-500-4	F	11-36-66- 67	20-50
n-Butyl acetate Nitrocellulose with max. 12,6 % Nitrogen	123-86-4 9004-70-0	204-658-1	F	10-66-67 11	10-20 20-50
Isopropyl	67-63-0		F Xi	11-36-67	20-35
Full description of the mer	itioned R-Phra	ises can be four			

4. First-Aid Measures

General indications:

In any case of severe injury, severe diseases and trouble of consciousness don't transport the affected person, but call a doctor. Find out accident details and nature of influence including quantity and duration of influence. Never instill anything through the mouth of an unconscious person. Immediately remove clothes that came in contact with the product. Bring casualty / inju out of the danger zone.

Inhalation:

Provide fresh air, if necessary mouth to mouth resuscitation, warmth. If troubles continue, call a doctor. In case of unconsciousness bedding and transport in recovery position.

Skin contact:

Rinse off with water and soap. If irritation of skin continues, call on a doctor.

Eye contact:

Rinse the opened eye with plenty of water and consult ophthalmologist.

Ingestion:

Rinse off mouth with water and drink a lot. Don't try to puke it up and get immediately in contact with a doctor. Never instill anything through the mouth of an unconscious person.

5. Fire-Fighting Measures

Suitable extinguishing media:

Foam, CO2 (carbon dioxide), fire extinguishing powder, fogging water. Fight bigger fires with fogging water or alcohol resistant foam.

Special danger caused by the products, its combustion products or emerging gases:

If heated or in case of fire can be released: vapours

The vapours of the product are heavier than air and diffuse on the ground. Combustion over bigger distances possible.

Special protection equipment:

Wear respiratory protection.

Further indications:

Container in danger has to be cooled with fogging water.

6. Accidental Release Measures

Personal precautions:

Use personal protective equipment, keep person without protection away. Remove sources of heat and ignition. Ventilate area of leak or spill. Eliminate containers with leaks. Avoid contact with skin and eyes.

Protection equipment:

Gloves of PVC. Get confirmation of the producer of protective equipment that the chosen protection is sufficient.

Environmental precautions:

Don't empty into drains, sewerage, canalization, soil and waters. Thin with much water. Methods for cleaning up:

Absorb with liquid soaking material (sand, diatomite, universal adsorbent).

Ensure good ventilation. Dispose of the absorbed product in marked and closable containers and according to local current regulations.

7. Handling and Storage

Handling:

Indications for a safe handling:

The normal protection measures for chemicals have to be respected.

Indications against fire and explosions:

Keep away from fire. Don't smoke. Take measures against static charge.

Storage :

Ensure a good ventilation. Store dry and cool.

Respect storage conditions according to VbF.

Indications for clustering:

Don't store close to open fire, sparks or strong oxidants. Don't store together with oxidizing or self-igniting materials, or with highly flammable solids.

Further indications for storage conditions:

Keep container firmly closed. Store cool and dry in well-closed package. <u>Storage class:</u>

Classification according to Ordinance on Industrial Safety and Health (BetrSichV): highly flammable.

8. Exposure Controls / Personal Protection Equipment

Engineering measures (prevention of worker exposure): Exposure limits of ingredients								
CAS-No.	Description	<u>Value</u>	<u>Unit</u>					
141-78-6 67-63-0	Ethyl acetate Isopropyl	MAK MAK	1500 mg/m ³ 500 mg/m ³	400 ml/m ³ 200 ml/m ³	Y; DFG Y; DFG			

Personal protection equipment :

General precautions for safety and hygiene:

Immediately take off contaminated and soaked clothes. Avoid inhalation of gases, vapours and aerosols. Avoid contact with skin or eyes. Do not smoke, eat or drink during work. Get confirmation of the producer of protective equipment that the chosen protection is sufficient.

Respiratory protection:

Wear respiratory protection when ventilation is not sufficient.

Hand protection:

Wear suitable protective gloves. The material of the gloves has to be impenetrable and resistant against the product. Respect the indications of the producer as to the permeability and breakthrough- time, as well as the special conditions at the working place (mechanical load, time of contact).

Material of gloves:

Gloves of PVC. The choice of a suitable glove depends not only on the material, but as well on other quality features, different from producer to producer. Since the product is a preparation of several materials, the resistance of the glove material is not predictable und therefore has to be verified before application.

Permeation time:

The exact time of permeation has to be requested from the producer of the protection gloves and has to be respected.

<u>Eye protection:</u> Wear sealed safety goggles.

<u>Body protection:</u> Wear protective working clothes.

9. Physical and Chemical Properties

Appearance: Colour: Odour:	liquid diverse, depending on colouring characteristic
Safety relevant data:	
Boiling point / range:	55°C
Ignition temperature:	315°C (DIN 51794)
Flash point:	-18°C
Danger of explosion:	Product can generate explosive vapour-gas mixture, risk of bursting in case of overheating.
Explosion limit:	lower 1,5 Vol. %; upper 13,0 Vol. %
Vapour pressure at 20°C:	247 hPa
Density :	not defined
Solubility in water:	partly mixable
Kinematic viscosity at 20°C:	
pH:	not applicable
•	• •

10. Stability and Reactivity:

<u>Thermal decomposition / conditions to avoid:</u> No decomposition if used in accordance to instructions, intense heating. <u>Substances to avoid:</u> None, if used in accordance to instructions. <u>Dangerous reactions:</u> Development of highly flammable gases and vapours. <u>Dangerous decomposition products:</u> No dangerous decomposition products known.

11. Toxicological Information:

Acute toxicity:
LD ₅₀ oral 5045 mg / kg (rat) Isopropyl
LD ₅₀ oral 5620 mg / kg (rat) Ethyl acetate
Primary irritation:
<u>On skin:</u>
Degreasing effect, can lead to dermatitis.
<u>At eyes:</u>
Irritating
Sensitization:
Not known.
Further toxicological information:
Inhalation of concentrated vapours can lead to conditions similar to narcosis and headache,
dizziness etc.

12. Ecological Information:

General indications:

Water hazard class 1 (self-rating): slightly hazardous to water Don't pour into ground water, water bodies or sewerage system undiluted or in bigger quantities.

13. Disposal Considerations:

Recommendation:

Mustn't be disposed of together with domestic waste. Don't pour into canalization. The choice the disposal procedure depends on the composition of the product at the time of disposal and the local disposal possibilities.

Waste code number:

For this product no waste code number according to European Waste Catalogue (EWC) can defined, since only the intended use by the consumer enables the classification. This Waste on number has to be defined in agreement with the disposal facility / producer / authority.

European Waste Catalogue:

08 01 11 paint and varnish waste, that contain organical solvents or other dangerous substan Uncleaned package:

Disposal according to official directives.

Recommendation detergent:

Water, if necessary add detergent.

14. Transport Information:

ADR/RID-GGVS/E class:	GGVS/GGVE (international / domestic) 3
Classification code:	F1
Packing group:	II
UN-No.:	1263
Proper shipping name:	Paint
Tunnel restriction code:	(D/E)
Transport by sea IMDG/GGVSea IMDG/GGVSea-Class: Packing group: UN-No.: EMS-No.: Proper Shipping Name: Properties:	1 3 II 1263 F-E, S-E Paint Flashpoint -18°C

EG – Safety Data Sheet

YETI Dentalprodukte GmbH According to 1907/2006/EG, article 31

Transport by air ICAO-TI and IATA-DGR

ICAO/IATA-class:	3
Packing group:	II
UN/ID-No.:	1263
Proper Shipping Name:	Paint
Packing Inst.:	305
Max. Quantity f. passenger aircraft:	5L

15. Regulatory Information:

<u>Specifications according to European Community guidelines:</u> The product is classified and marked according to European community guidelines and Ordinance on Hazardous Substances (GefStoffV).

Code letter and hazard information:



irritant



highly flammable

<u>R-Phrases:</u>

- R 11 highly flammable
- R 36 Irritates the eyes
- R 66 Repeated contact can lead to rough and cracked skin
- R 67 Vapours can cause drowsiness and dizziness

S-Phrases:

- S 2 Keep out of the reach of children.
- S 7 Keep container tightly closed.
- S 16 Keep away from fire don't smoke.
- S 24/35 Avoid contact with skin or eyes.
- S 26 In case of contact with the eyes, rinse immediately with water and consult a do

National regulations:

Classification according to Ordinance on Industrial Safety and Health (BetrSichV): highly flammable.

Water hazard class:

Water hazard class 1 (self-rating): slightly hazardous to water (self-rating according to VwVws 17.05.1999, appendix 3).

16. Other Information:

Wording of R-Phrases in Part 2:

- R 10 flammable
- R 11 highly flammable
- R 36 Irritates the eyes
- R 66 Repeated contact can lead to rough and cracked skin
- R 67 Vapours can cause drowsiness and dizziness

The statements of this Safety Data Sheet correlate to our actual state of knowledge and comply with national and european regulations. The indicated working conditions of the user are not subject to our control and knowledge. The product mustn't be used for any other purpose than indicated in Part 1 without written permission. The user is responsible for respecting all necessary legal regulations.

The safety data sheet serves as description of products in regard to necessary safety measures. The indications do not have the meaning of garanties on properties und do not establish a contractual legal relationship.

Appendix article group:500-0001