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# Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.02.2016 Version number 3 Revision: 25.02.2016

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

- · 1.1 Product identifier
  - · Trade name: Technovit 6091 Accelerator
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
  - · Application of the substance / the mixture Accelerator for Technvit 6091 and Technovit Hoofseal
- · 1.3 Details of the supplier of the safety data sheet
  - · Manufacturer/Supplier:

Heraeus Kulzer GmbH

Grüner Weg 11, D-63450 Hanau

Tel.: +49 (0)6181 9689-2570 (Wehrheim)

- Informing department: email: technik.wehrheim@kulzer-dental.com
- · 1.4 Emergency telephone number:

Emergency CÓNTACT (24-Hour-Number):GBK GmbH +49 (0)6132-84463

#### SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
  - · Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

- · 2.2 Label elements
  - · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



- · Signal word Warning
- · Hazard-determining components of labelling:

ethylene dimethacrylate

N,N-bis(2-hydroxyethyl)-p-toluidine

N,N-dimethyl-p-tóluidine

triethylenglycoldimethacrylate

· Hazard statements

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

· Precautionary statements

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

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P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P362 Take off contaminated clothing and wash before reuse.

P405 Store locked up.

· 2.3 Other hazards -

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

# SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

Description: -

•		
<ul> <li>Dangerous components:</li> </ul>		
CAS: 97-90-5	ethylene dimethacrylate	50-75%
EINECS: 202-617-2	Skin Sens. 1, H317; STOT SE 3, H335	
CAS: 3077-12-1	N,N-bis(2-hydroxyethyl)-p-toluidine	10-25%
EINECS: 221-359-1	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
CAS: 109-16-0	triethylenglycoldimethacrylate	5-10%
EINECS: 203-652-6	Skin Sens. 1B, H317	
Reg.nr.: 01-2119969287-21-0000		
CAS: 99-97-8	N,N-dimethyl-p-toluidine	0-5%
EINECS: 202-805-4	Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; STOT RE 2, H373; Aquatic Chronic 3, H412	
CAS: 15625-89-5	2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl	0-5%
EINECS: 239-701-3	diacrylate	
Reg.nr.: 01-2119489896-XXXX	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	

Additional information For the wording of the listed hazard phrases refer to section 16.

#### SECTION 4: First aid measures

#### · 4.1 Description of first aid measures

General information

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation Supply fresh air; consult doctor in case of symptoms.
- · After skin contact if skin irritation continues, consult a doctor.
- After eye contact Rinse opened eye for several minutes under running water. Then consult doctor.
- · After swallowing

Rinse out mouth and then drink plenty of water.

Instantly call for doctor.

In case of persistent symptoms consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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• 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

# SECTION 5: Firefighting measures

- 5.1 Extinguishing media
  - · Suitable extinguishing agents

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

• 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
  - · Protective equipment: Put on breathing apparatus.
  - · Additional information -

#### SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- 6.2 Environmental precautions: No special measures required.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).

Dispose of contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

# SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Keep containers tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

- Information about protection against explosions and fires: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
  - · Storage
    - · Requirements to be met by storerooms and containers: No special requirements.
    - Information about storage in one common storage facility: Not required.
    - Further information about storage conditions: None.
- · 7.3 Specific end use(s) No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 Control parameters
  - Components with critical values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

111011110	roa at the workplace.			
. [	DNELs			
15625-89-	·5 2-ethyl-2-[[(1-oxoallyl)o	xy]methyl]-1,3-propanediyl diacrylate		
Oral	ge.pop., l.te, syst.	1.39 mg/Kg (nd)		

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Dermal	ge.pop., l.te, syst.	0.48 mg/Kg/d (nd)	, , , ,
	worker industr., I.te., s	yst. 0.8 mg/Kg/d (nd)	
Inhalative	ge.pop., l.te, syst.	4.9 mg/m3 (nd)	
	worker industr., I.te., s	yst. 16.2 mg/m3 (nd)	
. 1	PNECs		
15625-89-	5	yl)oxy]methyl]-1,3-propanediyl di	acrylate
STP	6.25 mg/l (ı	nd)	
freshwate	0.00147 mg	g/l (nd)	
interm. wa	t. release 0.0147 mg/	l (nd)	
marine wa	ter 0.000147 n	ng/l (nd)	

· Additional information: The lists that were valid during the compilation were used as basis.

#### · 8.2 Exposure controls

sedim., dw, fre.wat.

#### Personal protective equipment

sedim., dw, mar.wat. 0.00062 mg/Kg (nd)

### · General protective and hygienic measures

0.0062 mg/Kg (nd)

0.0043 mg/Kg (nd)

Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

### · Breathing equipment:

Not neccessary with efficient local exhaust. If exposition to vapours is possible, use breathing protective mask (filter A).

#### Protection of hands:

If skin contact cannot be avoided, protective gloves are recommended to avoid possible sensitization.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

Chloroprene rubber, CR

· Eve protection: Safety glasses

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· Body protection: Light weight protective clothing

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9.1 Information on basic physical and	chemical properties	
General Information		
· Appearance: · Form:	Fluid	
· Colour:	Colourless	
· Smell:	Amine-like	
Odour threshold:	Not determined.	
· pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Not determined	
· Boiling point/Boiling range:	153 ℃	
· Flash point:	76 ℃	
· Inflammability (solid, gaseous)	Not applicable.	
· Ignition temperature:	320 ℃	
· Decomposition temperature:	Not determined.	
· Self-inflammability:	Product is not selfigniting.	
· Danger of explosion:	Product is not explosive.	
· Critical values for explosion:		
Lower:	Not determined.	
· Upper:	Not determined.	
· Steam pressure at 20 °C:	1 hPa	
· Density at 20 °C	1.08 g/cm³	
· Relative density	Not determined.	
Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix	
· Partition coefficient (n-octanol/wat	<b>er):</b> Not determined.	
· Viscosity:		
· dynamic:	Not determined.	
· kinematic:	Not determined.	
· Solvent content:	4	
· VOC EU	g/l	
· Solids content:	30.5 %	

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## SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
  - · Conditions to be avoided: No decomposition if used and stored according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: None

## SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
  - · Acute toxicity

Harmful if swallowed.

· LD/	· LD/LC50 values that are relevant for classification:		
97-90-5 et		methacrylate	
Oral		8700 mg/kg (rat)	
3077-12-1	3077-12-1 N,N-bis(2-hydroxyethyl)-p-toluidine		
Oral	LD50	300 mg/kg (rat)	
109-16-0 1	109-16-0 triethylenglycoldimethacrylate		
Oral	LD50	10837 mg/kg (rat)	
99-97-8 N	99-97-8 N,N-dimethyl-p-toluidine		
Oral	LD50	500 mg/kg (rat)	
Inhalative	LC50/4 h	1400 mg/l (rat)	
15625-89-5 2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate			
Oral	LD50	5200 mg/kg (rat)	
Dermal	LD50	6300 mg/kg (rabbit)	

- · Primary irritant effect:
  - · Skin corrosion/irritation
    - Causes skin irritation.
  - · Serious eye damage/irritation

Causes serious eye irritation.

· Respiratory or skin sensitisation

May cause an allergic skin reaction.

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
  - Germ cell mutagenicity Based on available data, the classification criteria are not met.
  - · Carcinogenicity Based on available data, the classification criteria are not met.
  - · Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure

May cause respiratory irritation.

- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

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### SECTION 12: Ecological information

- · 12.1 Toxicity
  - · Aquatic toxicity:

### 99-97-8 N,N-dimethyl-p-toluidine

LC50/96h 100 mg/l (fish)

- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
  - · Additional ecological information:
    - · General notes:

Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into soil.

- · 12.5 Results of PBT and vPvB assessment
  - · PBT: Not applicable.
  - · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

#### SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
  - · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · European waste catalogue
- 18 02 05 chemicals consisting of or containing dangerous substances
  - · Uncleaned packagings:
    - Recommendation: Disposal must be made according to official regulations.

14.1 UN-Number · ADR, ADN, IMDG, IATA	Void	
14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void	
14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	Void	
14.4 Packing group · ADR, IMDG, IATA	Void	
· 14.5 Environmental hazards: · Marine pollutant:	No	

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· 14.6 Special precautions for user	Not applicable.	
<ul> <li>14.7 Transport in bulk according to Annex Marpol and the IBC Code</li> </ul>	t <b>II of</b> Not applicable.	
· Transport/Additional information:	-	
· UN "Model Regulation":	Void	

### SECTION 15: Regulatory information

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

No further relevant information available.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweis (Swiss Ordinance on volatile organic compounds)

DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 3: Acute toxicity, Hazard Category 3 Acute Tox. 4: Acute toxicity, Hazard Category 4 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Skin Sens. 1B: Sensitisation - Skin, Hazard Category 1B STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

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Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3  $\cdot$  \* Data compared to the previous version altered.