

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Mixture  
Trade name : Absolute Dentin (all shades)  
Product code : S300, various

**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.2.1. Relevant identified uses**

Industrial/Professional use spec : For professional use only  
Use of the substance/mixture : Dual-Cure Resin Composite Restorative

**1.2.2. Uses advised against**

No additional information available

**1.3. Details of the supplier of the safety data sheet**

Parkell Inc.  
300 Executive Drive  
Edgewood, NY 11717  
T (631) 249-1134

Authorized Representative in Europe (Regulatory affairs only)

Directa AB  
P.O. Box 723, Finvids väg 8  
SE-194 27 Upplands Väsby  
Sweden

**1.4. Emergency telephone number**

Emergency number : INFOTRAC 1-352-323-3500 (International)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Skin sensitisation, Category 1 H317

Hazardous to the aquatic environment - Chronic H412

Hazard, Category 3

Full text of H statements : see section 16

**Adverse physicochemical, human health and environmental effects**

No additional information available

**2.2. Label elements****Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning  
Hazardous ingredients : Triethylene glycol dimethacrylate; Bicyclo[2.2.1]heptane-2,3-dione, 1,7,7-trimethyl-, (+.-.); N,N-Dimethylaminoethyl methacrylate  
Hazard statements (CLP) : H317 - May cause an allergic skin reaction  
H412 - Harmful to aquatic life with long lasting effects  
Precautionary statements (CLP) : P261 - Avoid breathing fume  
P272 - Contaminated work clothing should not be allowed out of the workplace  
P273 - Avoid release to the environment  
P280 - Wear protective gloves, eye protection  
P302+P352 - IF ON SKIN: Wash with plenty of water

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### 2.3. Other hazards not contributing to the classification

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Poly(oxy-1,2-ethanediyl), .alpha...alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-	(CAS-No.) 41637-38-1	16 - 24.5	Aquatic Chronic 4, H413
Triethylene glycol dimethacrylate	(CAS-No.) 109-16-0 (EC-No.) 203-652-6 (REACH-no) not available	5 - 10	Skin Sens. 1B, H317
Ethanol, 2,2'-[(4-methylphenyl)imino]bis-	(CAS-No.) 3077-12-1 (EC-No.) 221-359-1	0.5 - 2	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 3, H412
2,6-Di-tert-butyl-4-methylphenol	(CAS-No.) 128-37-0 (EC-No.) 204-881-4 (REACH-no) Not available	0.0005 - 0.5	Aquatic Chronic 1, H410
Bicyclo[2.2.1]heptane-2,3-dione, 1,7,7-trimethyl-, (.+.-)-	(CAS-No.) 10373-78-1 (EC-No.) 233-814-1	0.05 - 0.5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335
N,N-Dimethylaminoethyl methacrylate	(CAS-No.) 2867-47-2 (EC-No.) 220-688-8 (EC Index-No.) 607-132-00-3	0.05 - 0.5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person.
First-aid measures after inhalation	: Allow victim to breathe fresh air.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

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

Symptoms/effects after inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/effects after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: None known.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Minimal fire hazard. On combustion, forms: carbon oxides (CO and CO <sub>2</sub> ).
Explosion hazard	: Product is not explosive.

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Reactivity in case of fire : None known.

### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Do not breathe vapour.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Mechanically recover the product.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For disposal of residues refer to section 13 : Disposal considerations.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Provide good ventilation. Avoid breathing vapours. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Incompatible materials. Keep container closed when not in use.

Incompatible materials : Reducing agents. Oxidizing agent. Peroxides. Free radical initiators.

### 7.3. Specific end use(s)

Refer to Section 1.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Dibenzoyl peroxide (94-36-0)		
Austria	MAK (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (inhalable fraction)
Austria	MAK Short time value (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable fraction)
Belgium	Limit value (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Croatia	GVI (granična vrijednost izloženosti) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Czech Republic	Expoziční limity (PEL) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Denmark	Grænseværdie (langvarig) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Estonia	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Finland	HTP-arvo (8h) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Finland	HTP-arvo (15 min)	10 mg/m <sup>3</sup>
France	VME (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Germany	TRGS 900 Occupational exposure limit value (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (inhalable fraction)
Greece	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Hungary	AK-érték	5 mg/m <sup>3</sup>
Hungary	CK-érték	5 mg/m <sup>3</sup>
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Ireland	OEL (15 min ref) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (calculated)
Poland	NDS (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Poland	NDSch (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Portugal	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>

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Dibenzoyl peroxide (94-36-0)		
Slovakia	NPHV (priemerná) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Slovakia	NPHV (Hraničná) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Slovenia	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (inhalable fraction)
Slovenia	OEL STEL (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (inhalable fraction)
Spain	VLA-ED (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (calculated)
Norway	Grønseverdier (AN) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Norway	Grønseverdier (Korttidsverdi) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (value calculated)
Switzerland	MAK (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (inhalable dust)
Switzerland	KZGW (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (inhalable dust)
Australia	TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>

2,6-Di-tert-butyl-4-methylphenol (128-37-0)		
Austria	MAK (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Belgium	Limit value (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Bulgaria	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Bulgaria	OEL STEL (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>
Croatia	GVI (granična vrijednost izloženosti) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Denmark	Grænseværdie (langvarig) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Finland	HTP-arvo (8h) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Finland	HTP-arvo (15 min)	20 mg/m <sup>3</sup>
France	Local name	2,6-Di-tert-butyl-p-crésol
France	VME (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
France	Note (FR)	Valeurs recommandées/admises
Greece	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Portugal	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (inhalable fraction, aerosol and vapor)
Slovenia	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable fraction)
United Kingdom	Local name	2,6-Di-tert-butyl-p-cresol
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	30 mg/m <sup>3</sup> (calculated)
Switzerland	MAK (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable dust)

## 8.2. Exposure controls

### Appropriate engineering controls:

Provide adequate ventilation.

### Hand protection:

Impermeable protective gloves. (to European standard EN 374 or equivalent)

### Eye protection:

Chemical goggles or safety glasses. (to European standard EN 166 or equivalent)

### Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Paste
Colour	: Off-white, tooth shade
Odour	: Odourless.

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Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions of use.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Incompatible materials. Keep away from heat.

### 10.5. Incompatible materials

Reducing agents. Oxidizing agent. Peroxides. Free radical initiators.

### 10.6. Hazardous decomposition products

On combustion, forms: carbon oxides (CO and CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

Triethylene glycol dimethacrylate (109-16-0)	
LD50 oral rat	10837 mg/kg
2,6-Di-tert-butyl-4-methylphenol (128-37-0)	
LD50 oral	650 mg/kg (mouse)
LD50 dermal rat	> 2000 mg/kg
N,N-Dimethylaminoethyl methacrylate (2867-47-2)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LD50 dermal rabbit	> 3000 mg/kg
LC50 inhalation rat (mg/l)	0.62 mg/l/4h

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)

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Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water	: Harmful to aquatic life with long lasting effects.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.

#### 2,6-Di-tert-butyl-4-methylphenol (128-37-0)

EC50 72h algae (1)	6 mg/l (Species: Pseudokirchneriella subcapitata)
EC50 72h algae (2)	> 0,42 mg/l (Species: Desmodesmus subspicatus)

#### N,N-Dimethylaminoethyl methacrylate (2867-47-2)

EC50 Daphnia 1	53 mg/l (Exposure time: 48 h - Species: Daphnia magna)
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#### 12.2. Persistence and degradability

##### Absolute Dentin (all shades)

Persistence and degradability	Not established.
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#### 12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

Additional information : Avoid release to the environment

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Dispose of contents/container to comply with applicable local, national and international regulation.
Ecology - waste materials	: Avoid release to the environment.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.2. UN proper shipping name</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

#### 14.6. Special precautions for user

##### - Overland transport

Not regulated

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### - Transport by sea

Not regulated

### - Air transport

Not regulated

### - Inland waterway transport

Not regulated

### - Rail transport

Not regulated

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

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

##### Germany

VwVwS Annex reference : Water hazard class (WGK) 2, significant hazard to waters (Classification according to VwVwS, Annex 4)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

##### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Sources of Key Data: According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

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H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Sens. 1	H317	Calculation method
Aquatic Chronic 3	H412	Calculation method

SDS EU (REACH Annex II)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*