Printing date 25.02.2016 Version number 1 Revision: 25.02.2016

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

- · 1.1 Product identifier
- · Trade name: Prime&Bond active
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the mixture Adhesive
- · Uses advised against No further relevant information available.
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

DENTSPLY DeTrey GmbH

De-Trey-Str. 1 D-78467 Konstanz

GERMANY

Tel.: +49-(0)7531-583-0 Fax: +49-(0)7531-583-104

email: KonstanzDEU.info-sdb@dentsply.com

- · Further information obtainable from:
- Departement Research & Development for technical information
- Departement Marketing & Sales for distribution of the safety data sheets
- 1.4 Emergency telephone number: +49-(0)7531-583-0 8:00 17:00 (GMT + 1:00)

SECTION 2: Hazards identification

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

Flam. Liq. 3 H226 Flammable liquid and vapour.

Acute Tox. 4 H302 Harmful if swallowed.

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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

As this product is a medical device in the meaning of Directive 93/42/EEC and intended for use by the end consumer and is applied in an invasive manner or body contact, it is exempt from the labelling requirements according to regulation 1272/2008.

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

· Hazard pictograms







GHS02

GHS05 GHS07

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

Bisacrylamide 1

10-Methacryloyl-oxydecyl-dihydrogenphosphate

Bisacrylamide 2

· Hazard statements

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H412 Harmful 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.

(Contd. on page 2)

Printing date 25.02.2016 Version number 1 Revision: 25.02.2016

Trade name: Prime&Bond active

(Contd. of page 1)

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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/doctor.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Additional information:

Contains 4-(dimethylamino)benzonitrile. May produce an allergic reaction.

- · 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: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
	Bisacrylamide 1	25-50%
	♦ Acute Tox. 4, H302; Eye Irrit. 2, H319	
CAS: 67-63-0	propan-2-ol	10-<25%
EINECS: 200-661-7	🔖 Flam. Liq. 2, H225; 아 Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 85590-00-7	10-Methacryloyl-oxydecyl-dihydrogenphosphate	10-<25%
	🔷 Skin Corr. 1B, H314	
	Bisacrylamide 2	2,5-<10%
	♦ Acute Tox. 4, H302; Eye Irrit. 2, H319	
CAS: 87699-25-0	Dipentaerythritol pentaacrylate phosphate	2,5-<10%
	Aquatic Chronic 2, H411; 🕔 Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
CAS: 1197-19-9	4-(dimethylamino)benzonitrile	0,1-<1%
EINECS: 214-819-8	♠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	

[·] 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 Immediately remove any clothing soiled by the product.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Immediately wash with water and soap and rinse thoroughly.
- · After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Information for doctor No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

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Printing date 25.02.2016 Version number 1 Revision: 25.02.2016

Trade name: Prime&Bond active

(Contd. of page 2)

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents Water.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · **Protective equipment:** Self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· 6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Observe normal care for working with chemicals.

- · Handling Product is intended for dental use only.
- · Information about fire and explosion protection:



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 7.2 Conditions for safe storage, including any incompatibilities
- ·Storage
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Store away from oxidising agents.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit 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.

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

(Contd. on page 4)

Printing date 25.02.2016 Version number 1 Revision: 25.02.2016

Trade name: Prime&Bond active

(Contd. of page 3)

- · 8.2 Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Respiratory protection: Not necessary if room is well-ventilated.
- · Protection of hands:



Protective gloves.

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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.

· Eye protection:



Tightly sealed goggles.

· **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties · General Information · Appearance: Fluid Form: Colour: Yellow · Odour: Product specific · Odour threshold: Not determined. · pH-value at 20 °C: · Change in condition *Melting point/Melting range:* undetermined Boiling point/Boiling range: Undetermined. · Flash point: *30* °*C* (*c.c. Abel*) · Flammability (solid, gaseous) Not applicable. 425 °C · Ignition temperature: · Decomposition temperature: Not determined.

(Contd. on page 5)

Printing date 25.02.2016 Version number 1 Revision: 25.02.2016

Trade name: Prime&Bond active

	(Contd. of page
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air vapour mixtures are possible.
· Explosion limits:	
Lower:	2,0 Vol %
Upper:	13,4 Vol %
· Vapour pressure at 20 °C:	43 hPa
· Density at 20 °C:	$1,013 \text{ g/cm}^3$
· 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/wa	tter): Not determined.
· Viscosity:	
dynamic at 20 °C:	20 mPas
kinematic:	Not determined.
· Solvent content:	
Organic solvents:	15 %
Water:	20 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used 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: No dangerous decomposition products known

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects

· <i>LD/LC5</i>	0 value	es relevant for classification:
ATE (Ad	cute To	oxicity Estimates)
Oral	LD50	1114 mg/kg (rat)
Bisacryl	amide	1
Oral	LD50	500 mg/kg (rat)
CAS: 67	'-63-0 p	propan-2-ol
Oral	LD50	5045 mg/kg (rat)
Dermal	LD50	12800 mg/kg (rab)
CAS: 85	590-00	0-7 10-Methacryloyl-oxydecyl-dihydrogenphosphate
Oral	LD50	>2000 mg/kg (rat)
		(Contd. on page

Printing date 25.02.2016 Version number 1 Revision: 25.02.2016

Trade name: Prime&Bond active

	(Contd. of page 5)
Bisacrylamide 2	
Oral LD50 500 mg/kg (rat)	
CAS: 1197-19-9 4-(dimethylamino)benzonitrile	
Oral LD50 500 mg/kg (ATE)	

- · Primary irritant effect:
- · Skin corrosion/irritation

Causes severe skin burns and eye damage.

· Serious eye damage/irritation

Causes serious eye damage.

· Respiratory or skin sensitisation

Repeated or prolonged contact with the not polymerized product may cause sensitization for acrylates / methacrylates.

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

SECTION 12: Ecological information

· 12.1 Toxicity

	12.1 10.1.119		
	· Aquatic toxicity:		
	CAS: 67-63-0 propan-2-ol		
Ī	LC50/96h	1400 mg/l (Fish acute toxicity study)	
	EC50/48h	13299 mg/L (daphnia magna)	
ſ	CAS: 85590-00-7 10-Methacryloyl-oxydecyl-dihydrogenphosphate		
	EC50/48h	>100 mg/L (daphnia magna)	

- · 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.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

- · 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 together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 7)

Printing date 25.02.2016 Version number 1 Revision: 25.02.2016

Trade name: Prime&Bond active

	(Contd. of page 6)
· European	waste catalogue
18 01 06*	chemicals consisting of or containing hazardous substances
HP 3	Flammable
HP 6	Acute Toxicity
HP 8	Corrosive
HP 14	Ecotoxic

- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

· 14.1 UN-Number	
ADR, IMDG, IATA	UN2920
14.2 UN proper shipping name	
ADR	2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S. (A
· IMDG	Methacryloyl-oxydecyl-dihydrogenphosphat ISOPROPANOL (ISOPROPYL ALCOHOL)) CORROSIVE LIQUID, FLAMMABLE, N.O.S. (I Methacryloyl-oxydecyl-dihydrogenphosphat ISOPROPANOL (ISOPROPYL ALCOHOL)) Corrosive liquid, flammable, n.o.s. (10-Methacryloy oxydecyl-dihydrogenphosphate, Isopropanol)
142 Tanana (14 a a a 14 a a a	oxyaecyi-ainyarogenphosphate, isopropanoi)
• 14.3 Transport hazard class(es)	
ADR	
Class	8 (CF1) Corrosive substances.
Label	8+3
IMDG	
Class	8 Corrosive substances.
· Label	8/3
· IATA	
Class	8 Corrosive substances.
· Label	8 (3)
14.4 Packing group	
ADR, IMDĞ, İATÂ	II
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user Danger code (Kemler):	Warning: Corrosive substances. 83

Printing date 25.02.2016 Version number 1 Revision: 25.02.2016

Trade name: Prime&Bond active

	(Contd. of page
· EMS Number:	F-E,S-C
· Stowage Category	E
· Stowage Code	SW1 Protected from sources of heat.
	SW2 Clear of living quarters.
· 14.7 Transport in bulk according to Ann	ex II of
Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
$\cdot ADR$	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	$D\!/\!E$
· UN ''Model Regulation'':	UN 2920 CORROSIVE LIQUID, FLAMMABLE, N.O.
-	(10-METHACRYLOYL-OXYDECYL
	DIHYDROGENPHOSPHATE, ISOPROPANO
	(ISOPROPYL ALCOHOL)), 8 (3), II

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5.000 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50.000 t
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

The attached safety data sheet covers the dangers and measures to be taken when large quantities of material are released, for example due to accidents during transport or storage by the dealer.

For quantities of material typically used in clinical practice, information necessary for safe use and storage of the product is given in the DFU.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

- · Department issuing SDS: Research & Development
- · Contact: HotLine for urgent technical support: +49-7531-583-350
- · 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)

(Contd. on page 9)

(Contd. of page 8)

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

Printing date 25.02.2016 Version number 1 Revision: 25.02.2016

Trade name: Prime&Bond active

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids, Hazard Category 2

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

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

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

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3