

SAFETY DATA SHEET (EC 1907/2006)

Bond-on 4

Version: 1.9 / GB Material no. 5315030002
Revision date: 25.09.2017 Specification 102802
Issue date: 03.09.2001 VA-Nr 01773672
replaces version: 1.8
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name Bond-on 4
REACH Registration No.: if available listed in Chapter. 3

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

Relevant applications identified For dental use only.

1.3. Details of the supplier of the safety data sheet

Company DeguDent GmbH
Postfach 1364
D-63403 Hanau
Telephone +49 (0)6181/59-5767
Telefax +49 (0)6181/59-5879
Email address SDB.Degudent-DE@dentsplysirona.com

1.4. Emergency telephone number

Emergency information +49 (0)6181/59-50 (This telephone number is available during office hours only.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Remarks Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2. Label elements

Labelling as per (EU) 1272/2008

Statutory basis Labelling not required according to EU-CLP Ordinance (1272/2008).

2.3. Other hazards

In case of melting, soldering or grinding:, Dusts and vapors: Do not inhale.
A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

SECTION 3: Composition/information on ingredients

3.1. Substances

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3.2. Mixtures

Information on ingredients / Hazardous components as per EU-CLP Regulation (EC) No. 1272/2008

• Gold	1.0%		
CAS-No.	7440-57-5	EC-No.	231-165-9
• platinum	1.0%		
CAS-No.	7440-06-4	EC-No.	231-116-1

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• Palladium 79.7%			
CAS-No.	7440-05-3	EC-No.	231-115-6
• Ruthenium 0.8%			
CAS-No.	7440-18-8	EC-No.	231-127-1
• copper 5.0%			
CAS-No.	7440-50-8	EC-No.	231-159-6
• Tin 6.5%			
CAS-No.	7440-31-5	EC-No.	231-141-8
• Gallium 6.0%			
CAS-No.	7440-55-3	EC-No.	231-163-8

Texts of H phrases, see in Chapter 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Dusts and vapours:
Remove to fresh air.

Eye contact

Dusts and vapours:
Rinse thoroughly with plenty of water keeping eyelid open.
If eye irritation persists, consult a specialist.

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

Symptoms

No information available.

Hazards

None known

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

If skin sensitisation has developed and a causal relationship has been confirmed, further exposure should not be allowed

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Special powder against metal fire
quenching powder
dry sand
common salt

Unsuitable extinguishing media: Water
Carbon dioxide (CO₂)

5.2. Special hazards arising from the substance or mixture

None known.

5.3. Advice for firefighters

Extinction measures are to be adjusted to the specific location.
The product itself does not burn.
Employ protective equipment commonly used in the event of fire.

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

No special measures are required.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Use mechanical handling equipment.

6.4. Reference to other sections

Wear personal protective equipment; see section 8.

Disposal considerations; see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

In case of melting, soldering or grinding:

Dusts and vapors: Do not inhale.

Local ventilation.

No special measures are necessary if properly handled.

In case of dust or vapor: Wear personal safety equipment

7.2. Conditions for safe storage, including any incompatibilities

Storage

No special storage conditions required.

German storage class

13 - Non Combustible Solids

7.3. Specific end use(s)

We are unaware of any specific end uses which go beyond the data reported in Section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

• platinum			
CAS-No.	7440-06-4	EC-No.	231-116-1
Control parameters	5 mg/m3		Time Weighted Average (TWA):(EH40 WEL)
Control parameters	1 mg/m3		Time Weighted Average (TWA):(EU ELV)
	Indicative		
• copper			
CAS-No.	7440-50-8	EC-No.	231-159-6
Control parameters	1 mg/m3		Time Weighted Average (TWA):(EH40 WEL)
type of exposure	Inhalable dusts and mists.		
Control parameters	2 mg/m3		Short Term Exposure Limit (STEL):(EH40 WEL)
type of exposure	Inhalable dusts and mists.		
Control parameters	0.2 mg/m3		Time Weighted Average (TWA):(EH40 WEL)
type of exposure	Fume.		
• Tin			
CAS-No.	7440-31-5	EC-No.	231-141-8
Control parameters	2 mg/m3		Time Weighted Average (TWA):(EU ELV)
	Indicative		

8.2. Exposure controls

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Engineering measures

In case of melting, soldering or grinding:, Adequate exhaustion / ventilation of the work site or machinery must be assured. Vacuuming of objects.

Personal protective equipment

Respiratory protection

Do not inhale smoke, dust, vapor.

If workplace exposure limit is exceeded apply Dust mask with P2 particle filter.

Hand protection

No special protective equipment required.

Eye/face protection

Safety glasses with side-shields

Skin and body protection

No particular measures required.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice., Do not eat, drink, smoke, or sniff while at work. Wash your hands and/or face before breaks and before termination of work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Form	solid
Colour	yellow

Odour	odourless
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Odour threshold:	not applicable
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pH	not applicable
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Melting point/range	1155 - 1290 °C
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Boiling point/range	not applicable
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Flash point	not applicable
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Evaporation rate	not applicable
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Flammability (solid, gas)	not flammable
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Lower explosion limit	not applicable
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Upper explosion limit	not applicable
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Vapour pressure	not applicable
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Density	11.5 g/cm ³
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Water solubility	insoluble
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Partition coefficient: n-octanol/water	not applicable
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Autoinflammability	Not capable of spontaneous combustion or heating.
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Thermal decomposition	not applicable
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Viscosity, dynamic not applicable

Explosiveness not applicable

Oxidizing properties not oxidizing

9.2. Other information

Other information No further physicochemical data were determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

no data available

10.2. Chemical stability

The product is chemically stable.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No dangerous reactions known.

10.4. Conditions to avoid

No limitations

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

Decomposition products occurring when heated above melting temperature
metallic vapors

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity no data available

Acute inhalation toxicity no data available

Acute dermal toxicity no data available

Skin irritation no data available

Eye irritation no data available

Sensitization no data available

Repeated dose toxicity no data available

Assessment of STOT single exposure no data available

Assessment of STOT repeat exposure no data available

Mutagenicity assessment no data available

Carcinogenicity No data available

Toxicity to reproduction No data available

Further information No hazardous reactions are known if properly handled and stored.

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**SECTION 12: Ecological information****12.1. Toxicity**

No ecotoxicological data is available for this product.

12.2. Persistence and degradability

Biodegradability no data available

12.3. Bioaccumulative potential

Bioaccumulation no data available

12.4. Mobility in soil

Mobility The product is insoluble in water.
No further information available

12.5. Results of PBT and vPvB assessment

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

12.6. Other adverse effects

Further Information Introduction into soil, natural water bodies or sewerage must be prevented.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Product**

Can be used after re-conditioning.

SECTION 14: Transport information

Not dangerous according to transport regulations.

14.1. UN number:	--
14.2. UN proper shipping name:	--
14.3. Transport hazard class(es):	--
14.4. Packing group:	--
14.5. Environmental hazards:	--
14.6. Special precautions for user:	No

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National legislation****15.2. Chemical safety assessment**

Chemical safety assessment No Chemical Safety Report as per Articles 2(8), 2(9) or 14 of the REACH Regulation is required for this product.

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SECTION 16: Other information

Classification and applied procedure to derive the classification of mixtures according to EU Regulation (EC) No. 1272/2008 (CLP)

Further information

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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Legend

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ASTM	American Society for Testing and Materials
ATP	Adaptation to Technical Progress
BCF	Bioconcentration factor
BetrSichV	German Ordinance on Industrial Safety and Health
c.c.	closed cup
CAS	Chemical Abstract Services
CESIO	European Committee of Organic Surfactants and their Intermediates
ChemG	German Chemicals Act
CMR	carcinogenic-mutagenic-toxic for reproduction
DIN	German Institute for Standardization
DMEL	Derived minimum effect level
DNEL	Derived no effect level
EINECS	European Inventory of Existing Commercial Chemical Substances
EC50	half maximal effective concentration
GefStoffV	German Ordinance on Hazardous Substances
GGVSEB	German ordinance for road, rail and inland waterway transportation of dangerous goods
GGVSee	German ordinance for sea transportation of dangerous goods
GLP	Good Laboratory Practice
GMO	Genetic Modified Organism
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
ISO	International Organization For Standardization
LOAEL	Lowest observed adverse effect level
LOEL	Lowest observed effect level
NOAEL	No observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
o. c.	open cup
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational Exposure Limit
PBT	Persistent, bioaccumulative, toxic
PEC	Predicted effect concentration
PNEC	Predicted no effect concentration

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REACH	REACH registration
RID	Convention concerning International Carriage by Rail
STOT	Specific Target Organ Toxicity
SVHC	Substances of Very High Concern
TA	Technical Instructions
TPR	Third Party Representative (Art. 4)
TRGS	Technical Rules for Hazardous Substances
VCI	German chemical industry association
vPvB	very persistent, very bioaccumulative
VOC	volatile organic compounds
VwVwS	German Administrative Regulation on the Classification of Substances Hazardous to Waters into Water Hazard Classes
WGK	Water Hazard Class
WHO	World Health Organization